

Figure 1

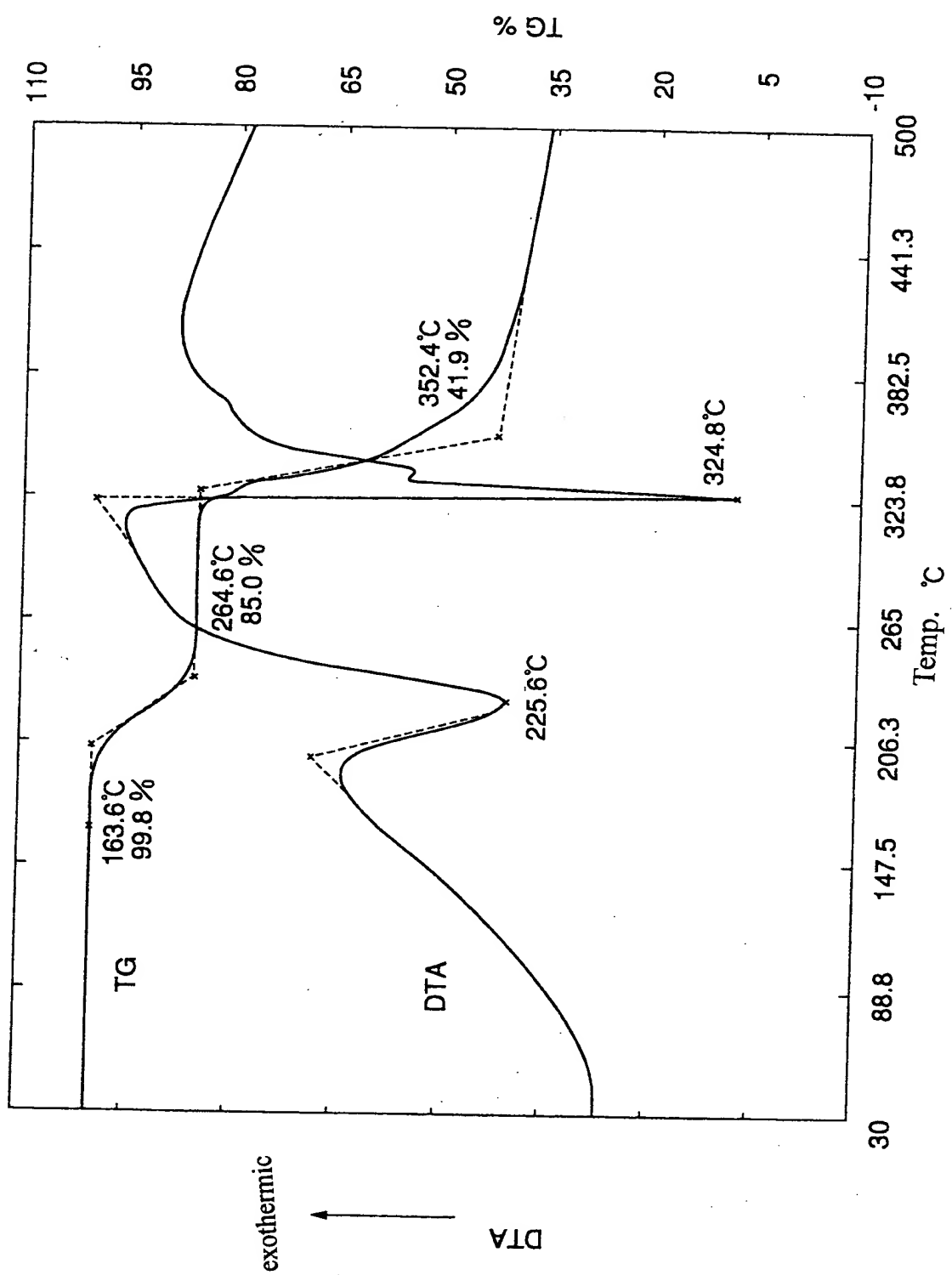


Figure 2

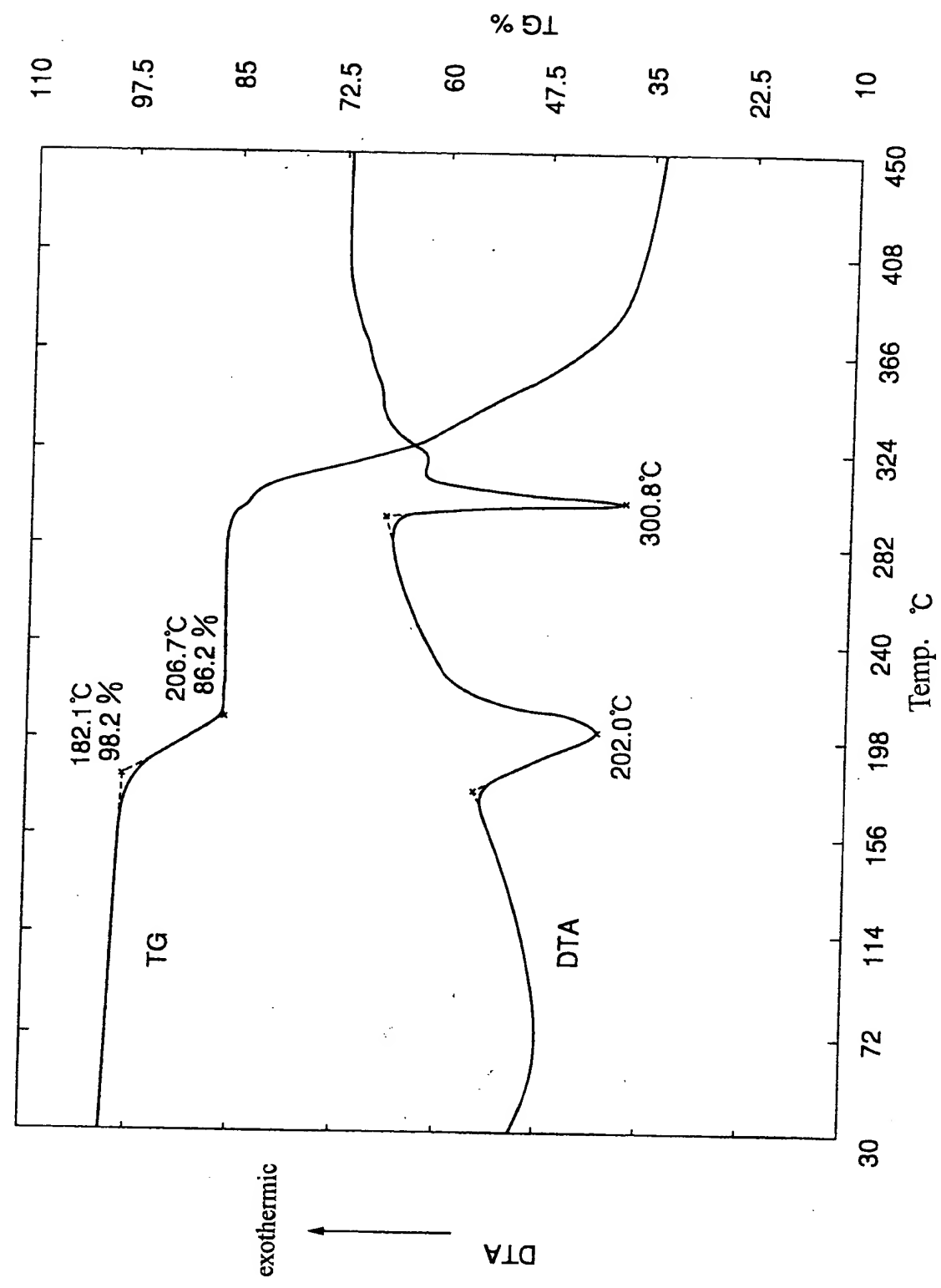


Figure 3

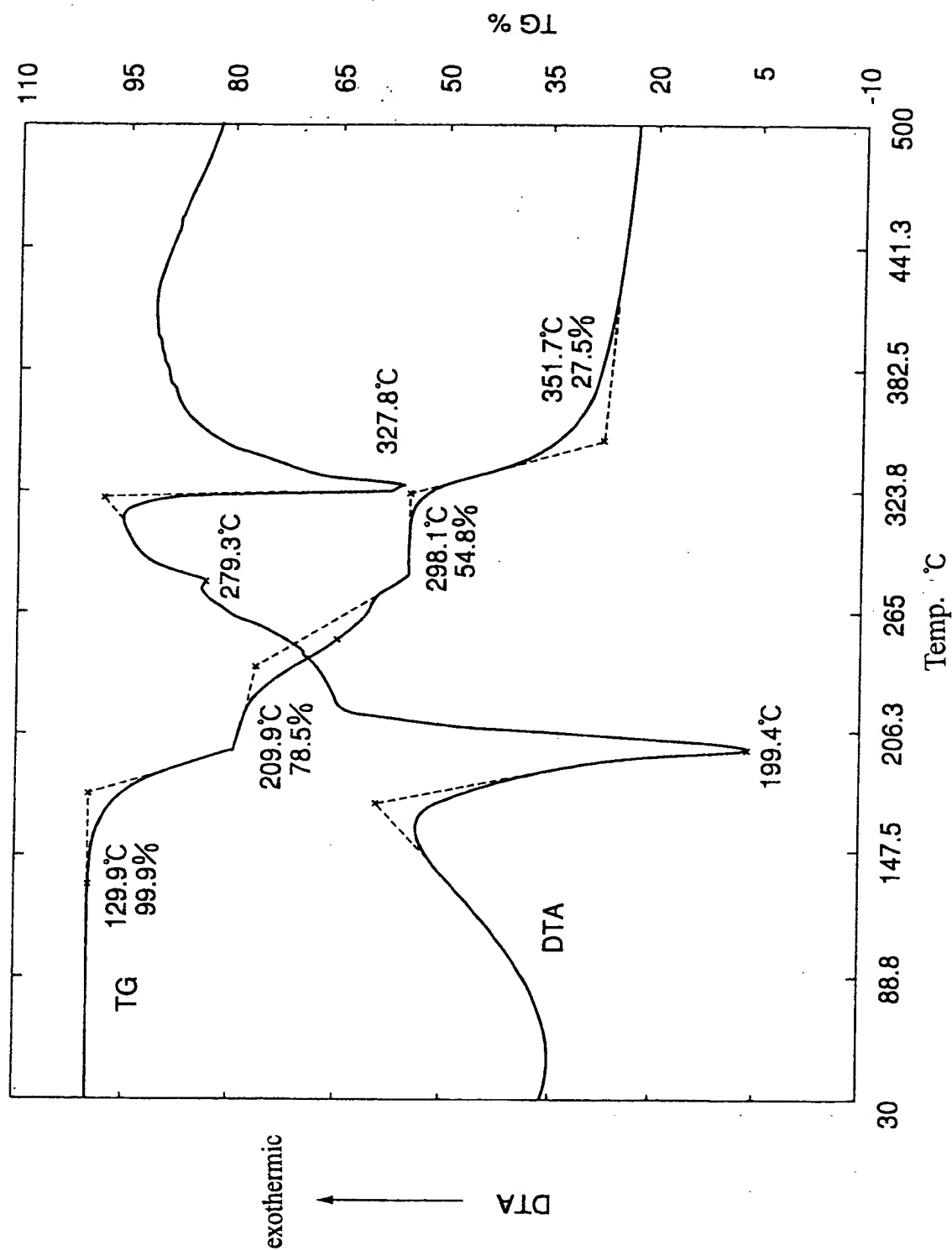
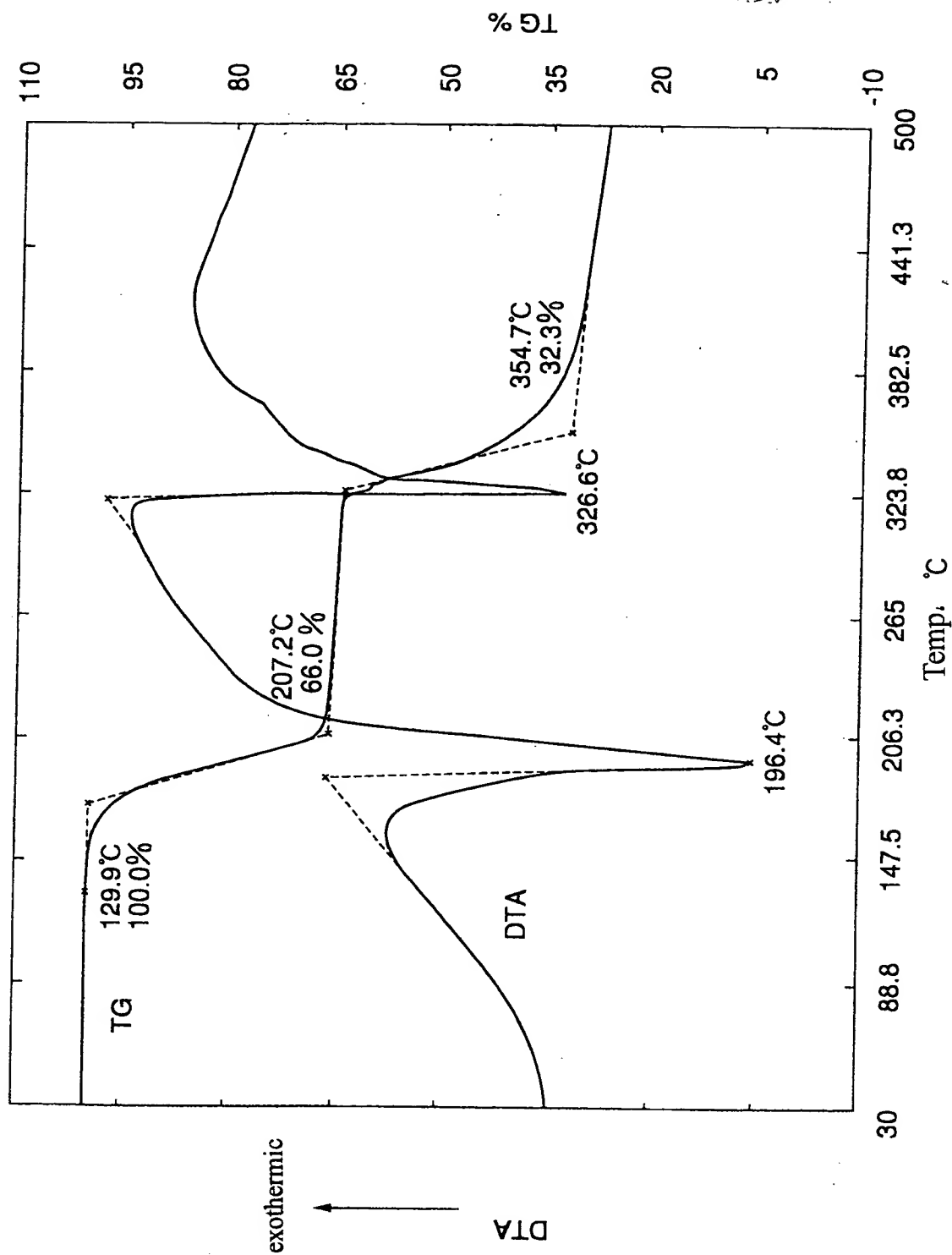
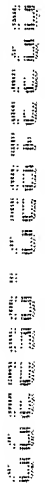


Figure 4



[illegible]

CONFIDENTIAL

Figure 6

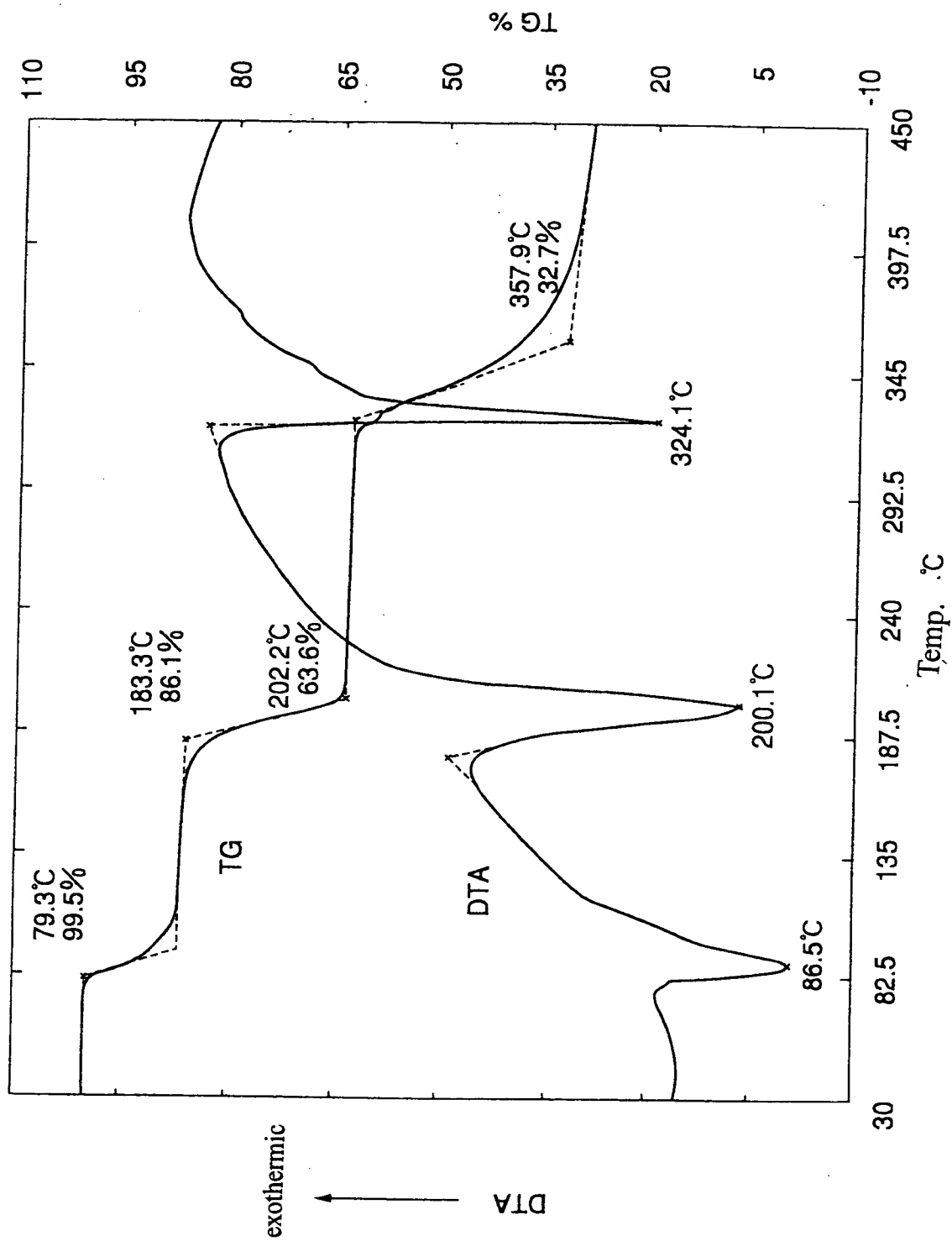
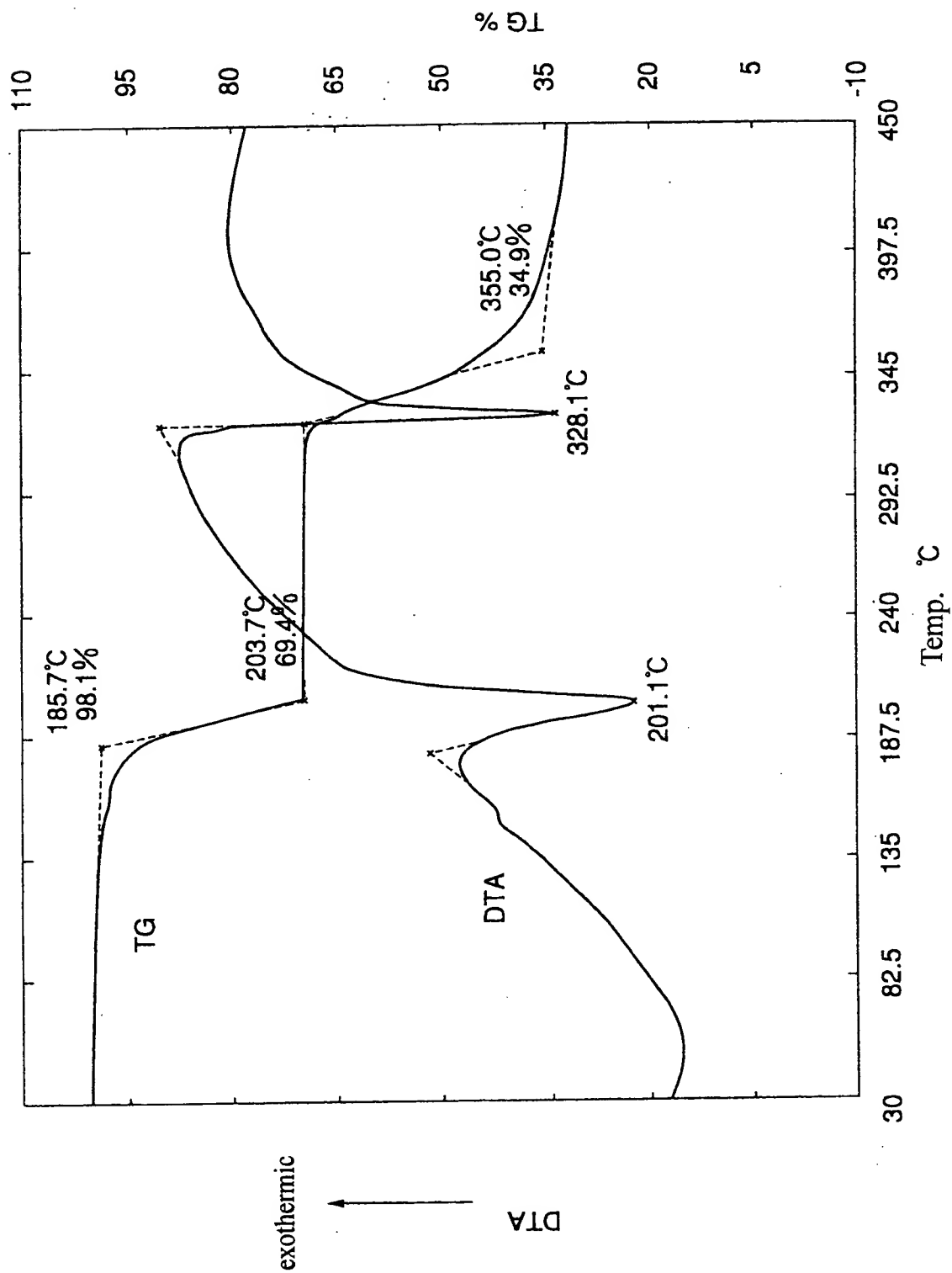


Figure 7



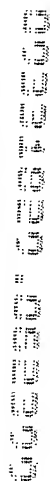
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Figure 9

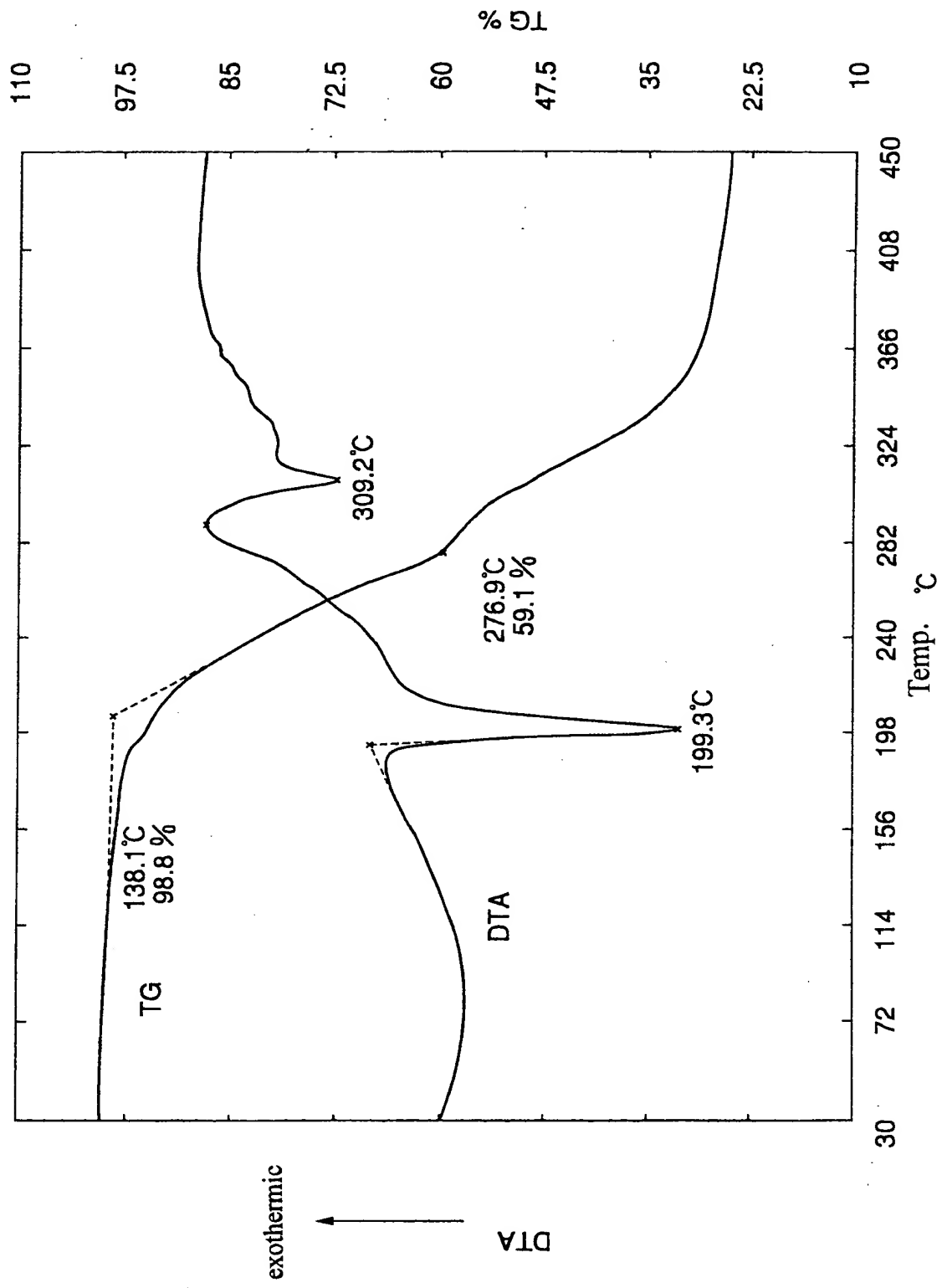
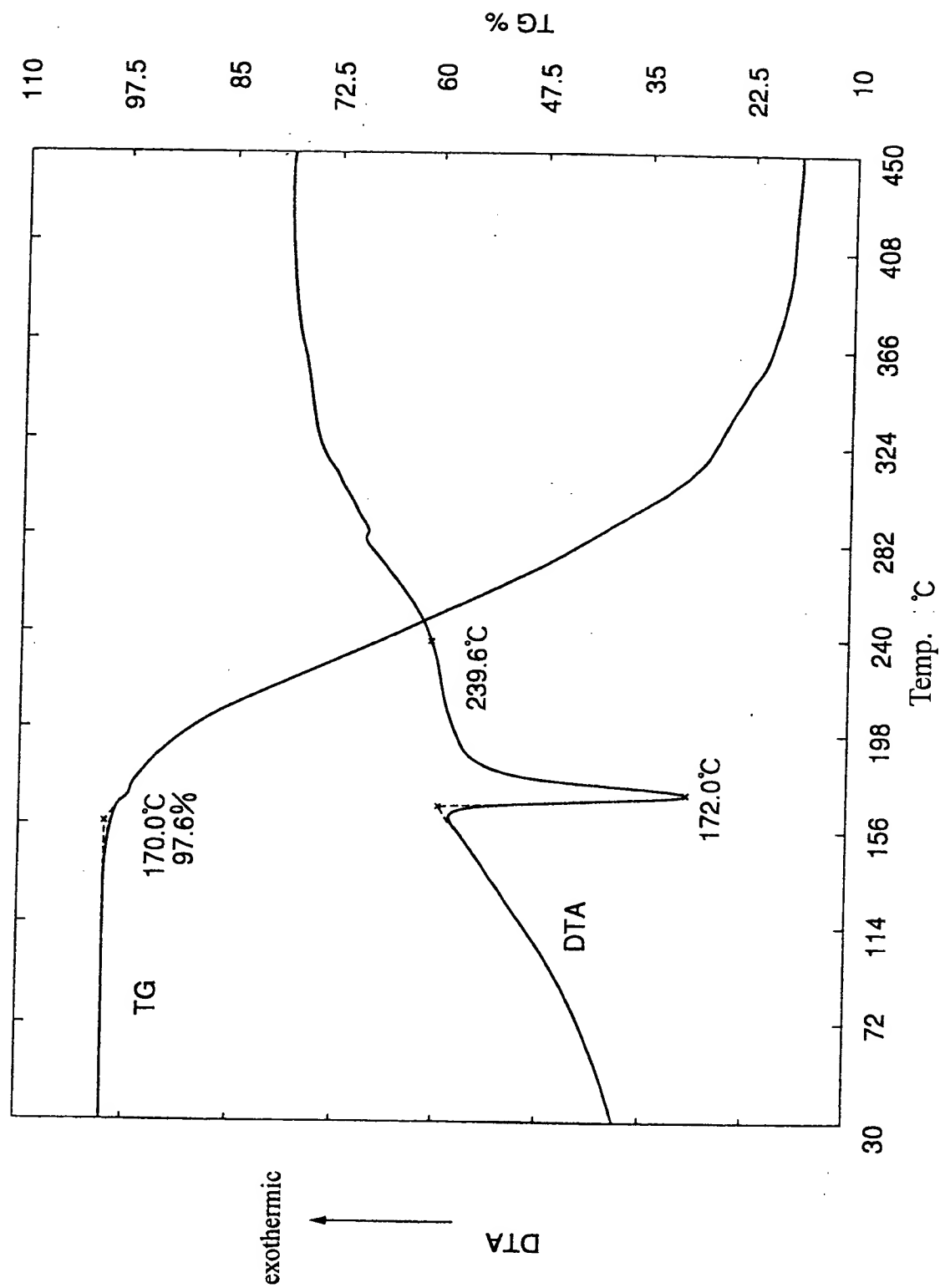


Figure 10



"00000" 000000

Figure 11

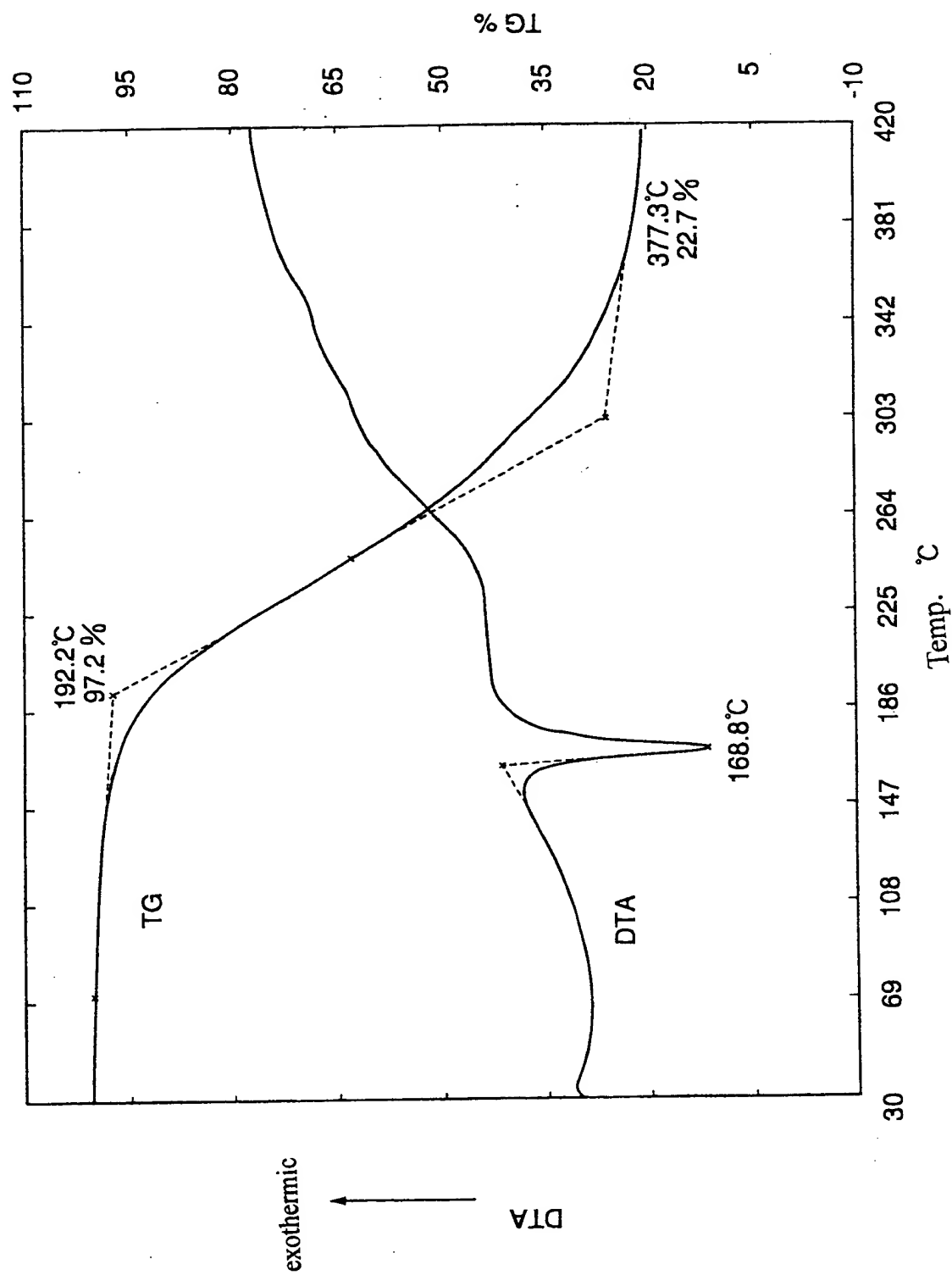


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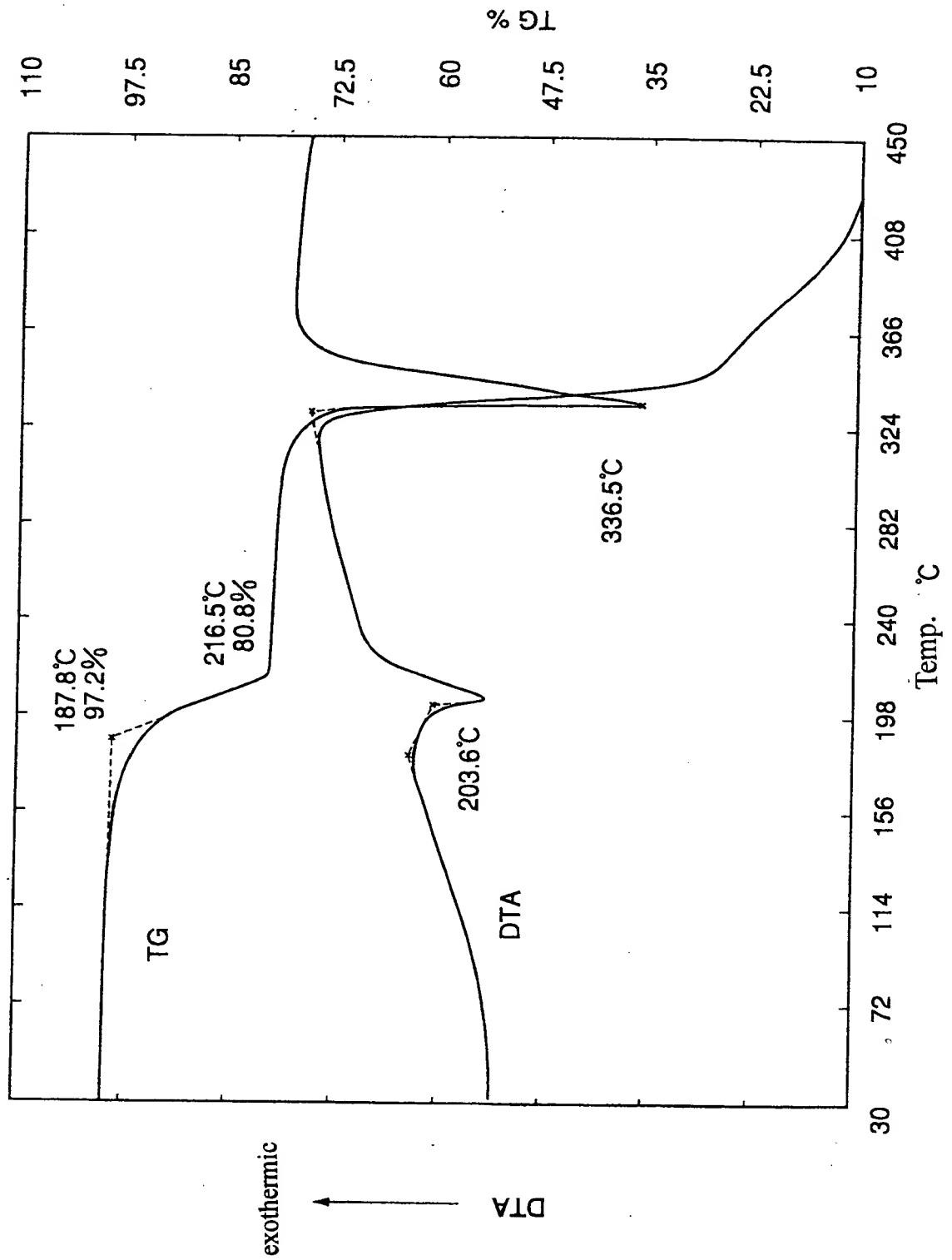
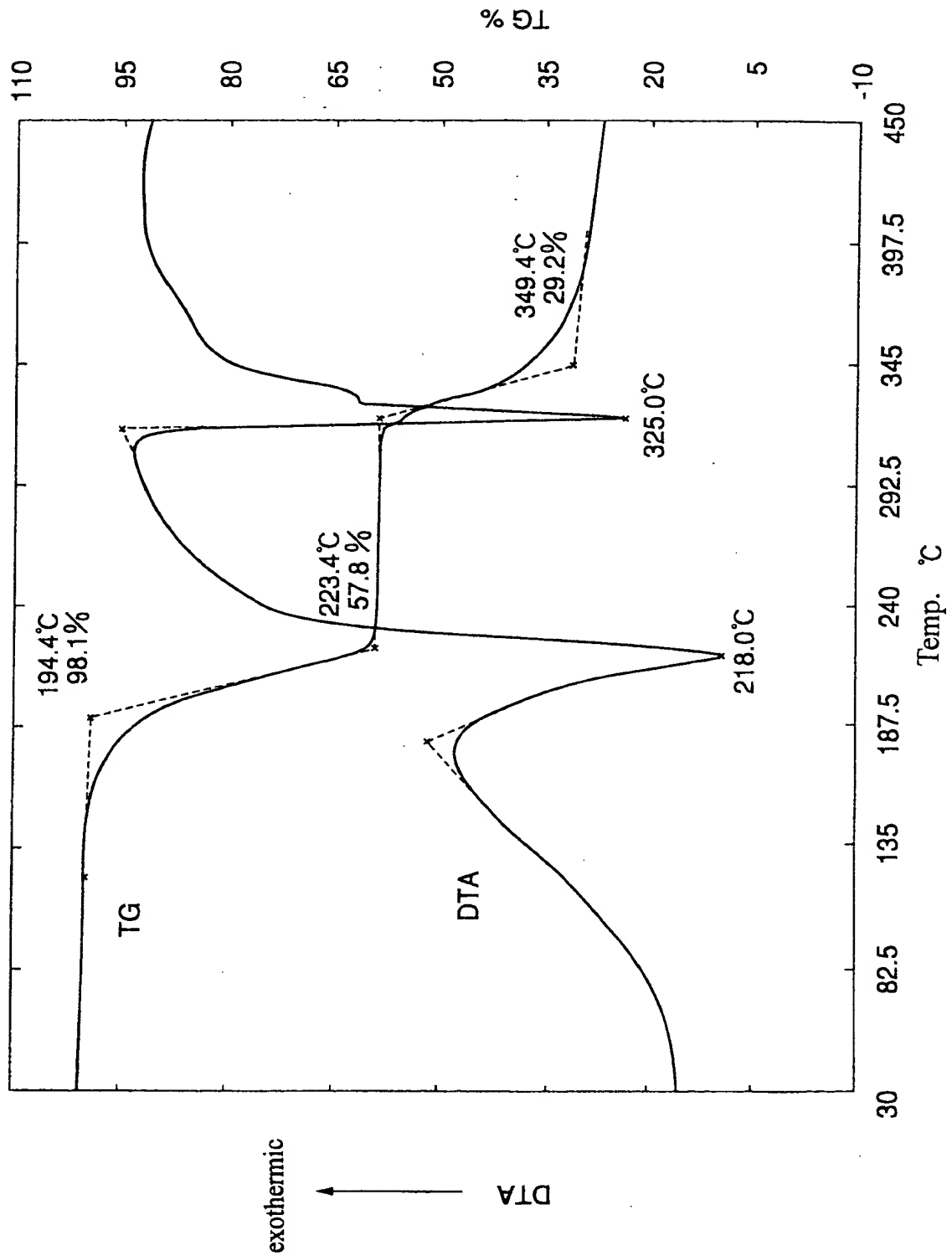


Figure 13





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Figure 16

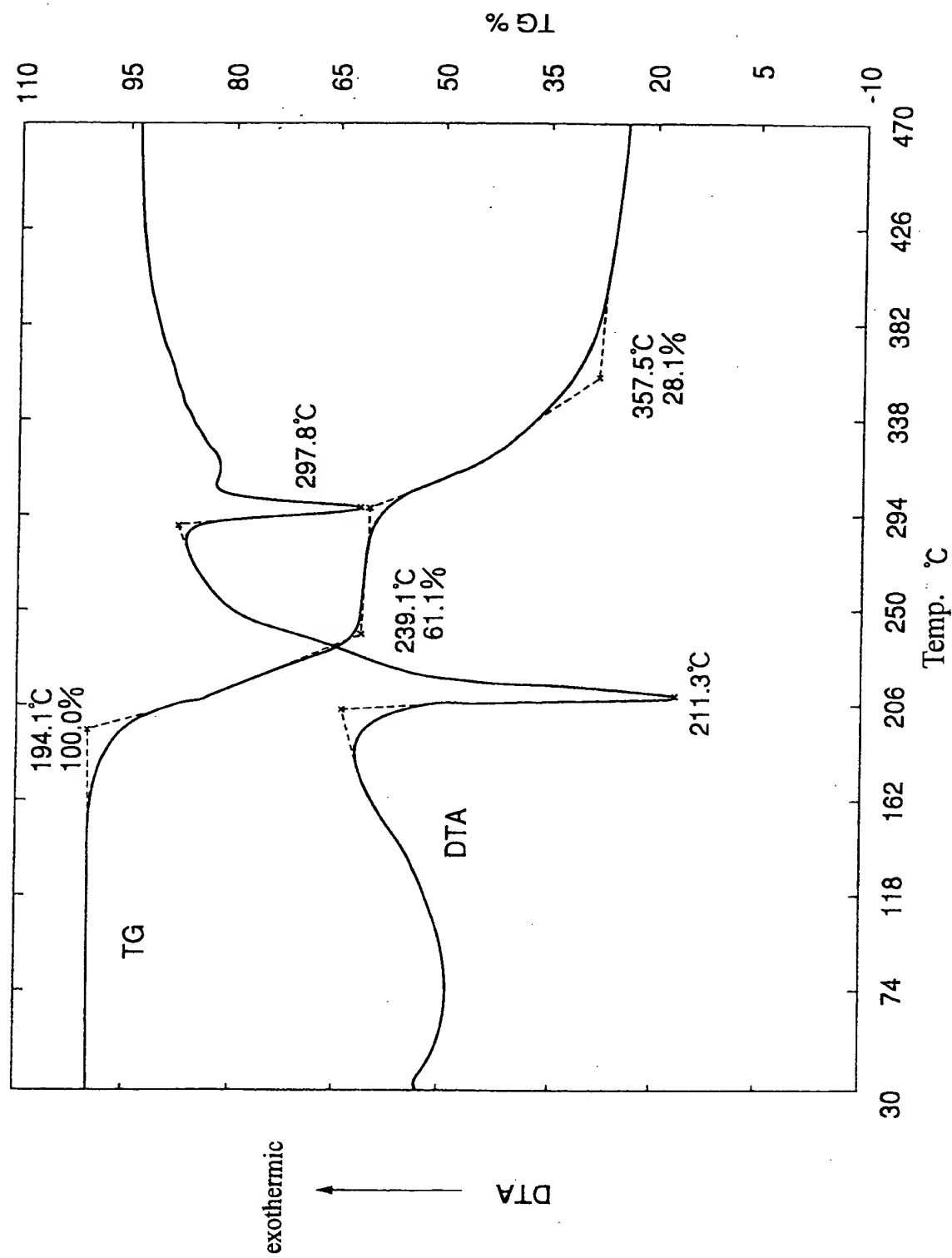




Figure 17

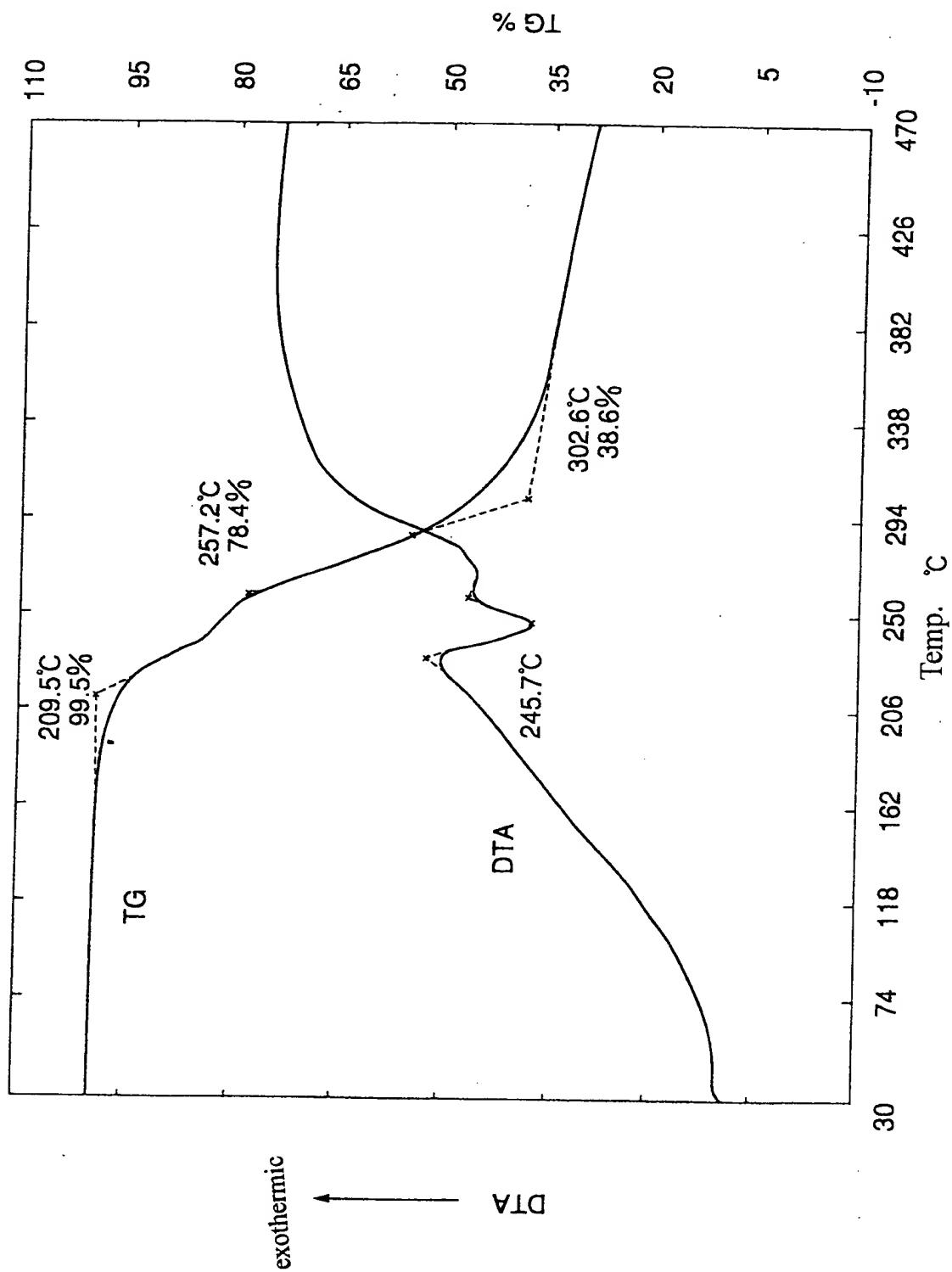


Figure 18

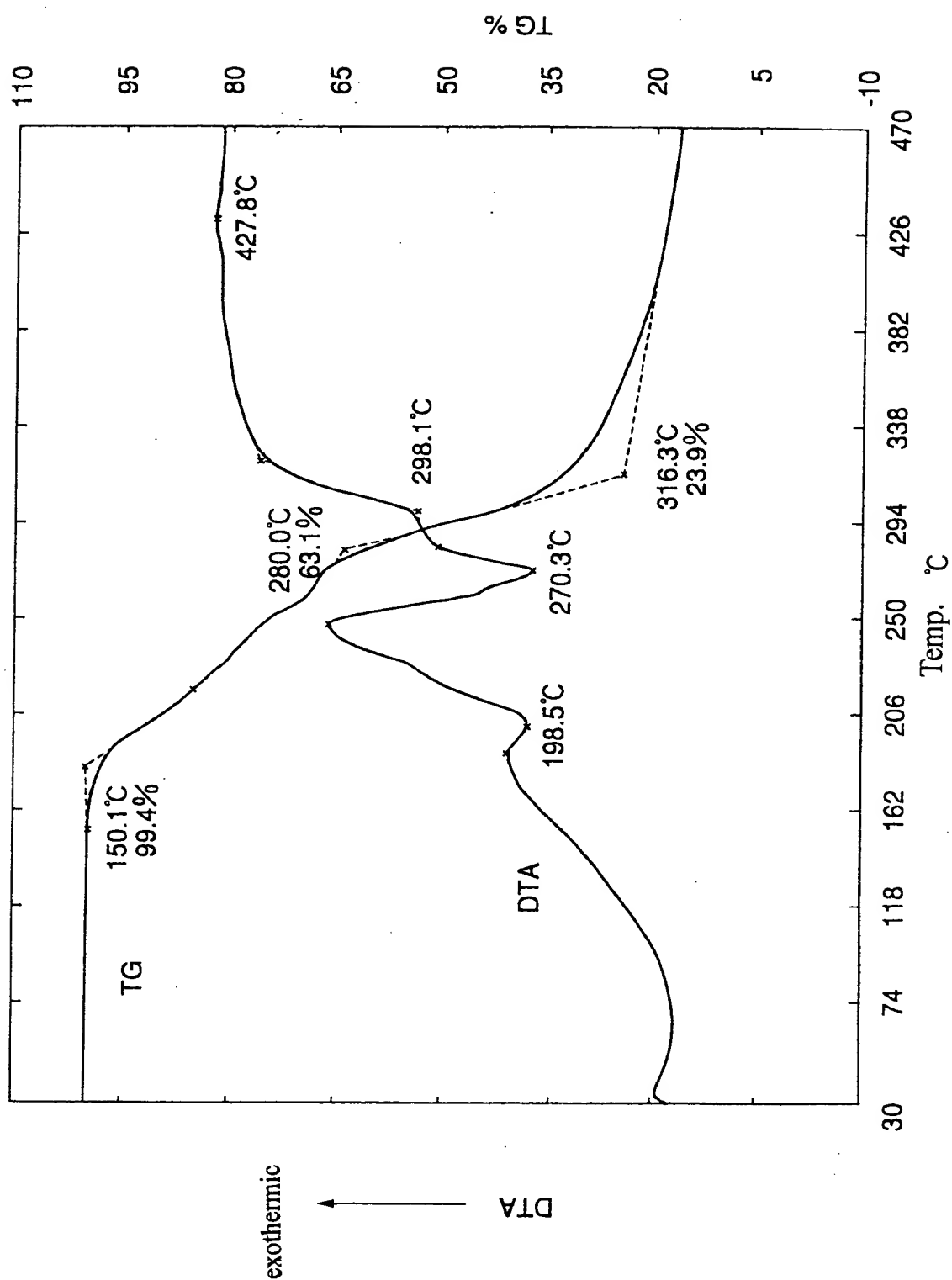


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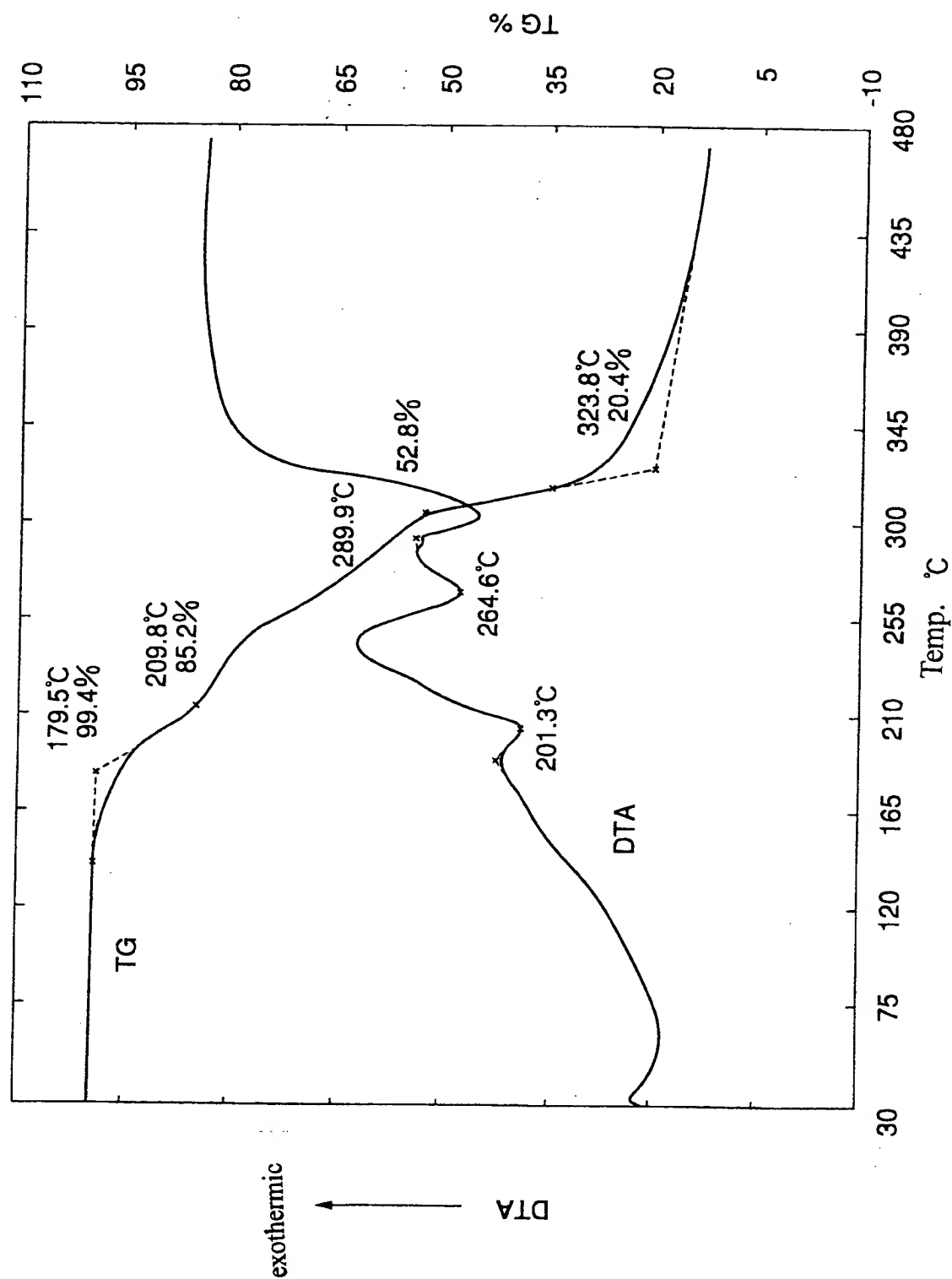


Figure 20

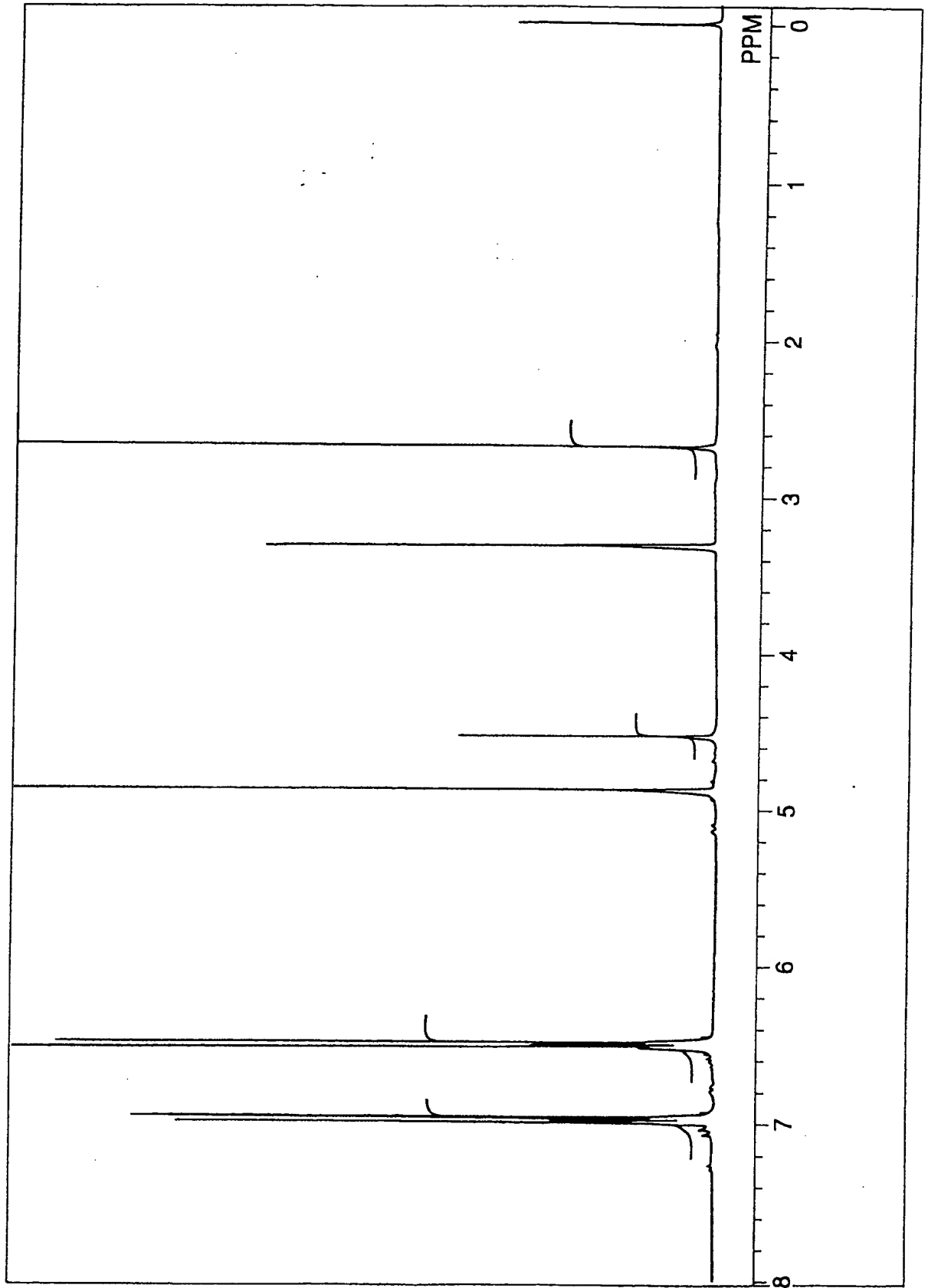
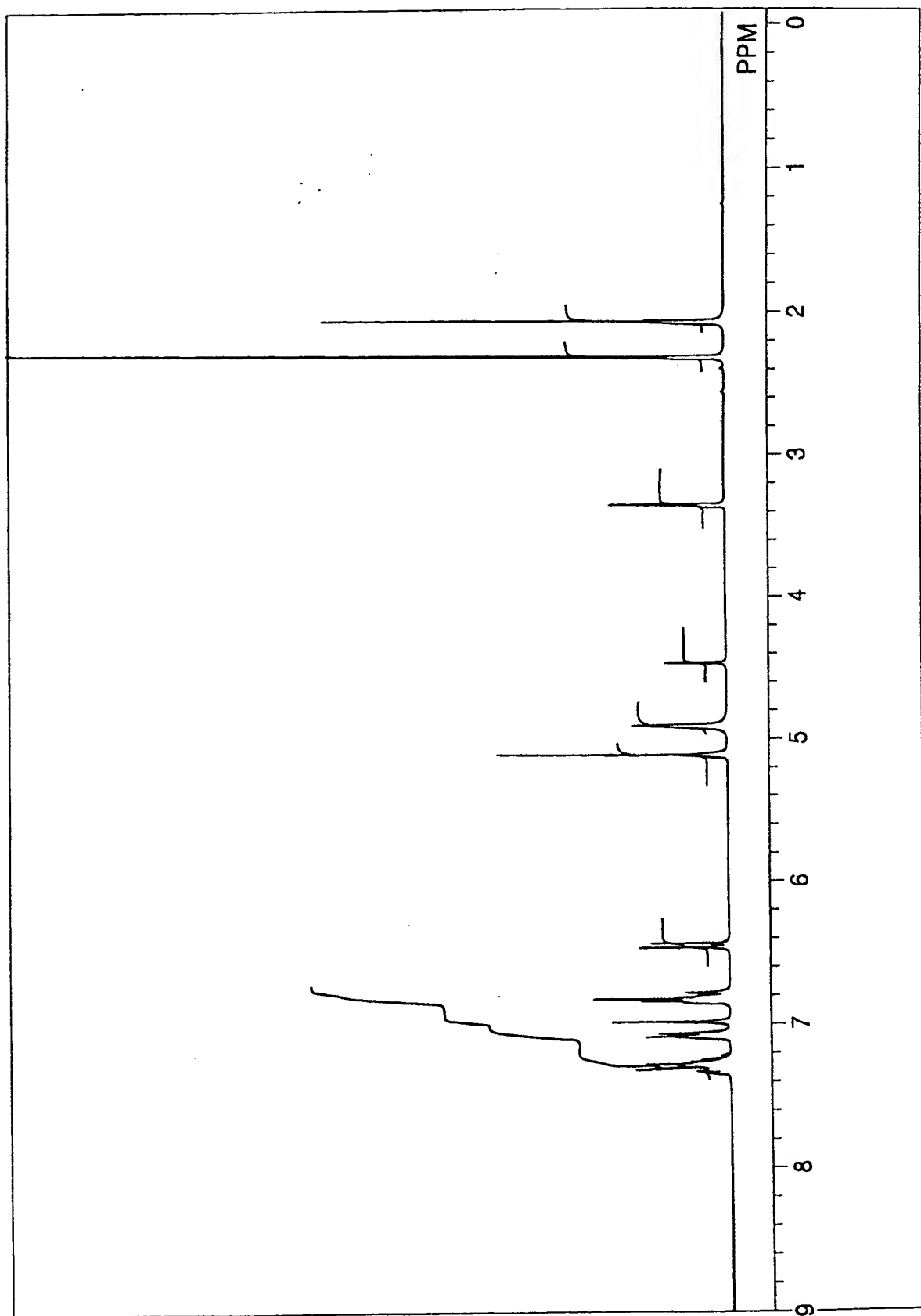








Figure 24





The infrared spectrum of polyacetylene displays characteristic absorption bands. A broad peak is observed around 3300 cm⁻¹, corresponding to the C-H stretching vibration. A very sharp and intense peak is located at approximately 2100 cm⁻¹, characteristic of the C≡C stretching vibration. The region between 1600 and 1400 cm⁻¹ shows several sharp peaks, which are typical for the C=C stretching and C-H bending vibrations in the conjugated system.





Figure28

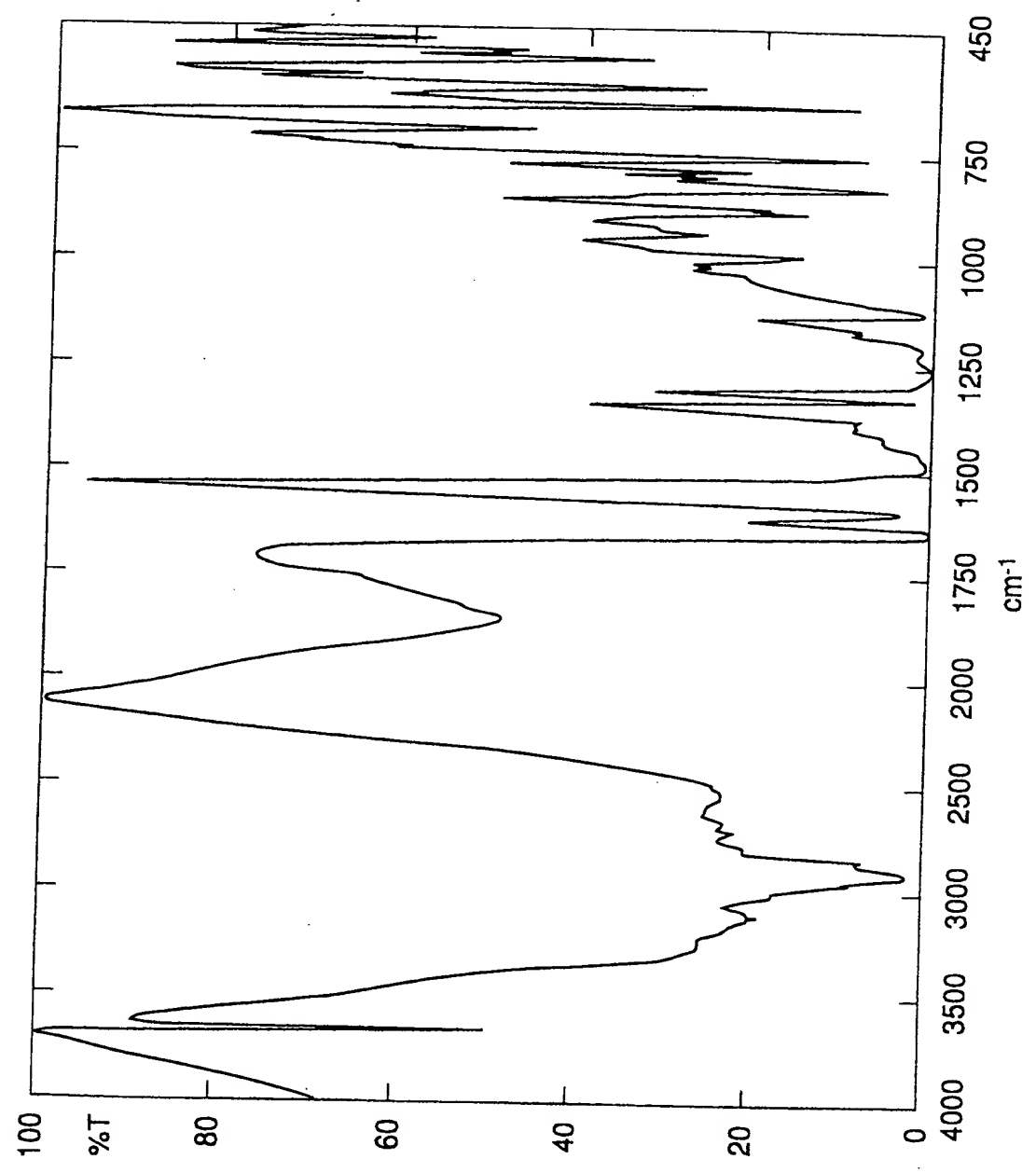


Figure 29

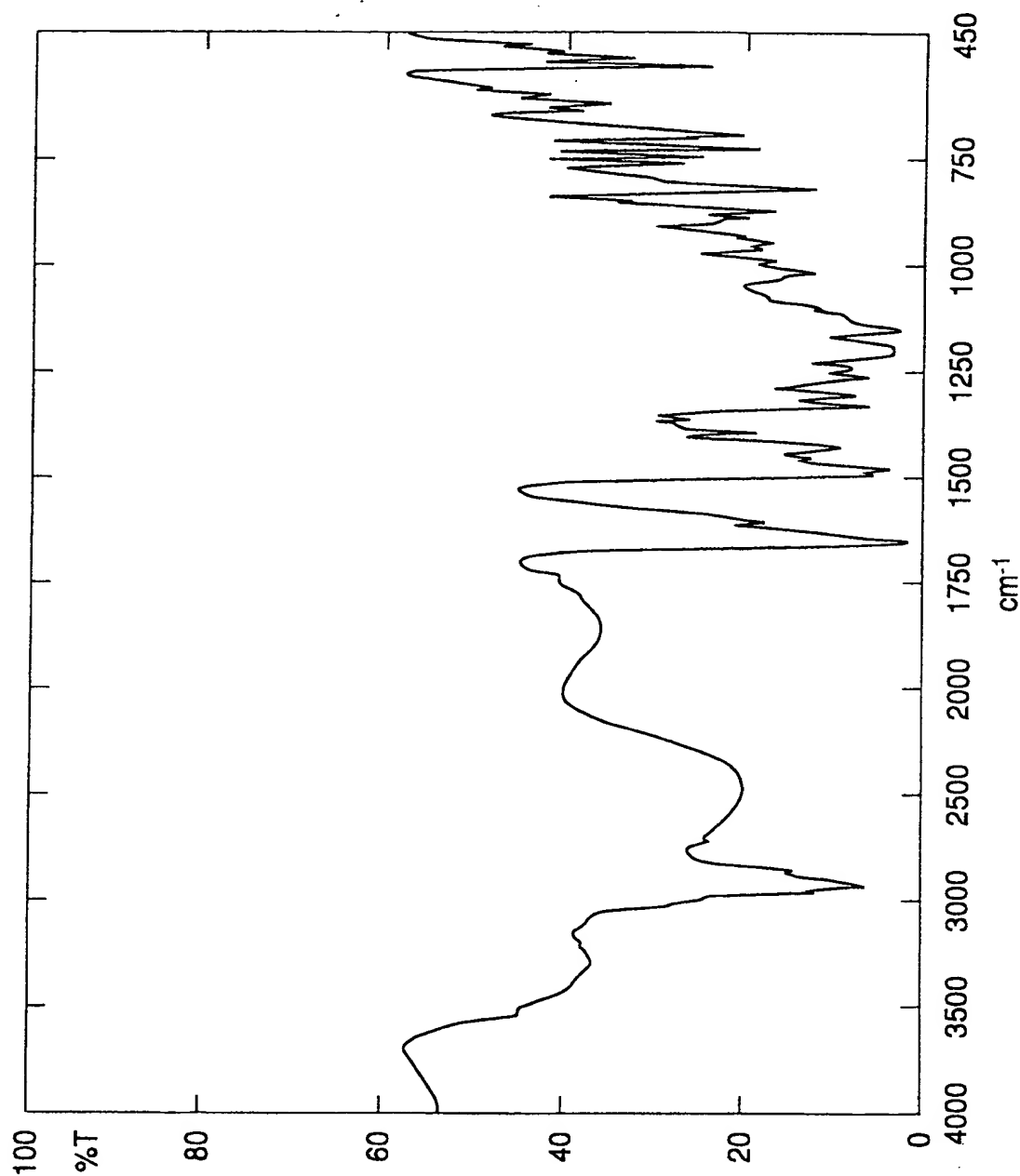


Figure 30

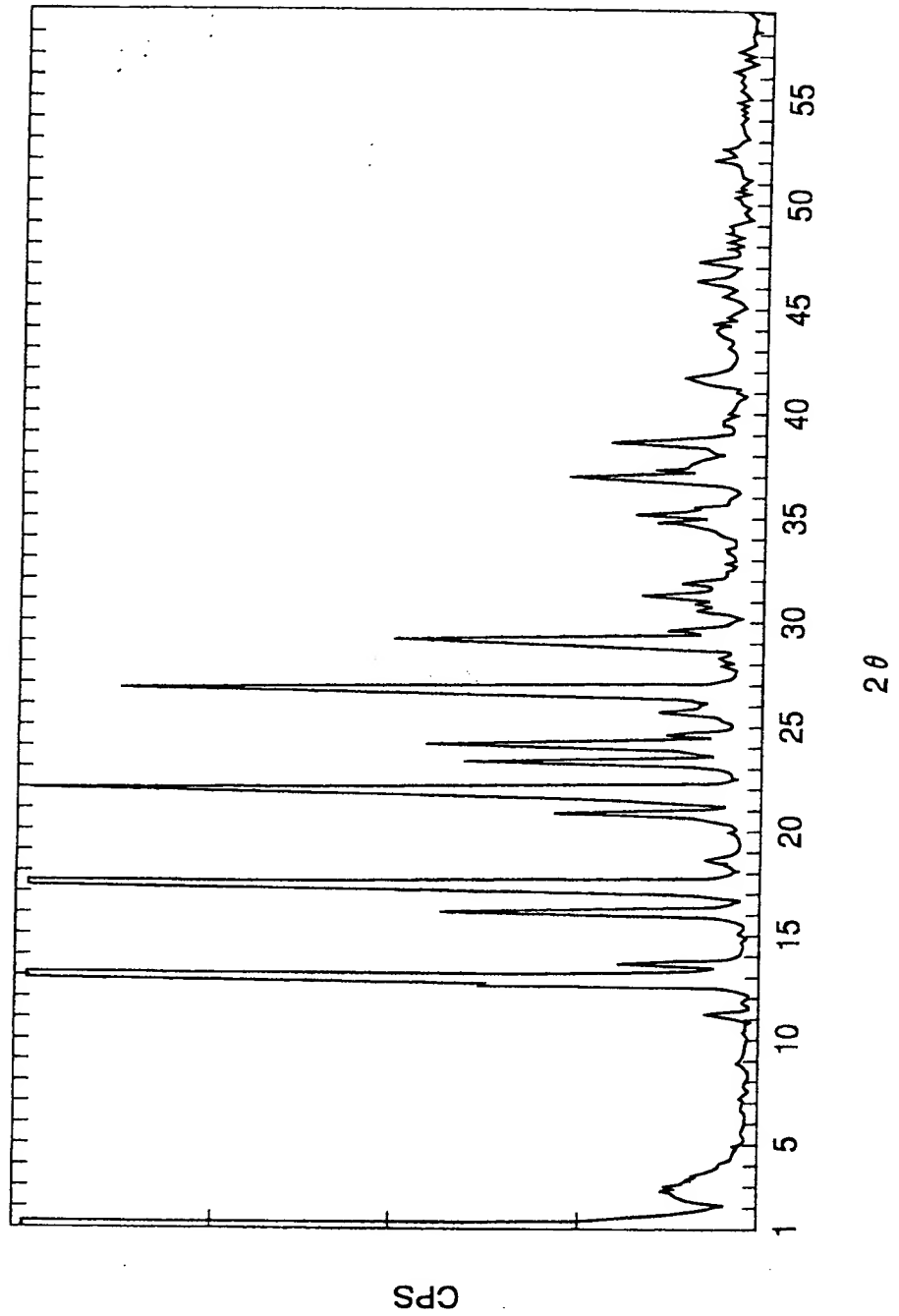
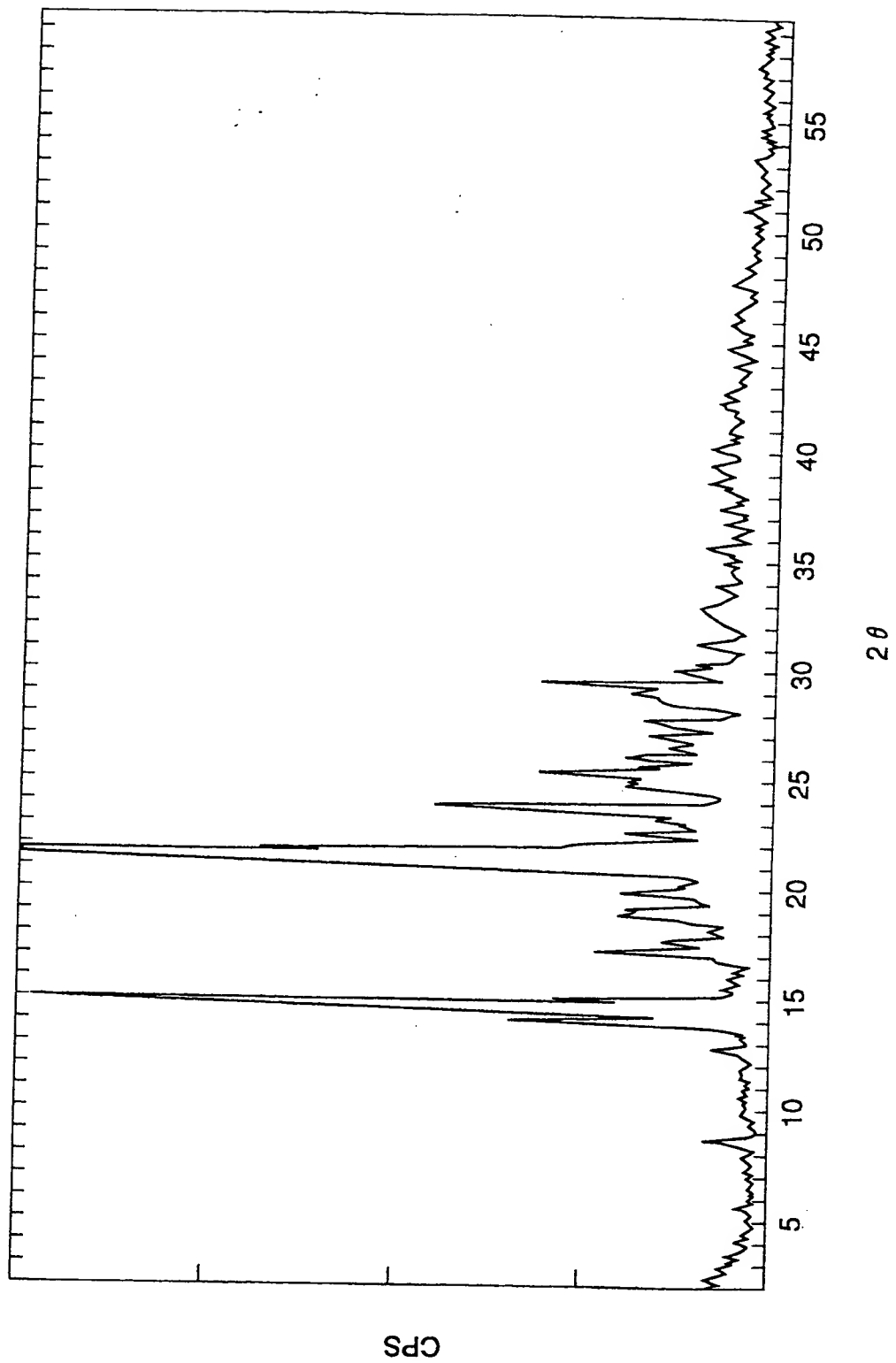


Figure 31





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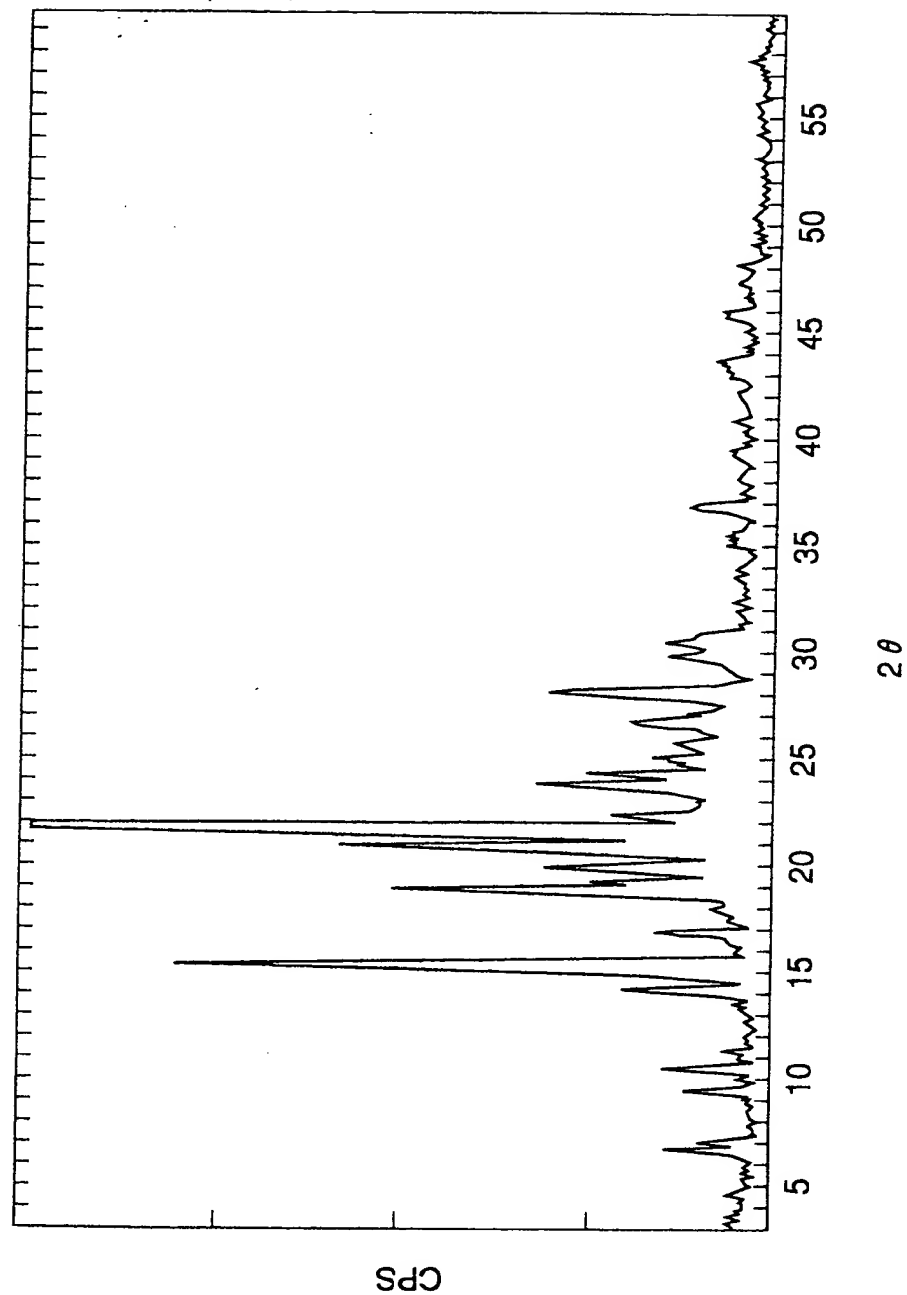




Figure 33

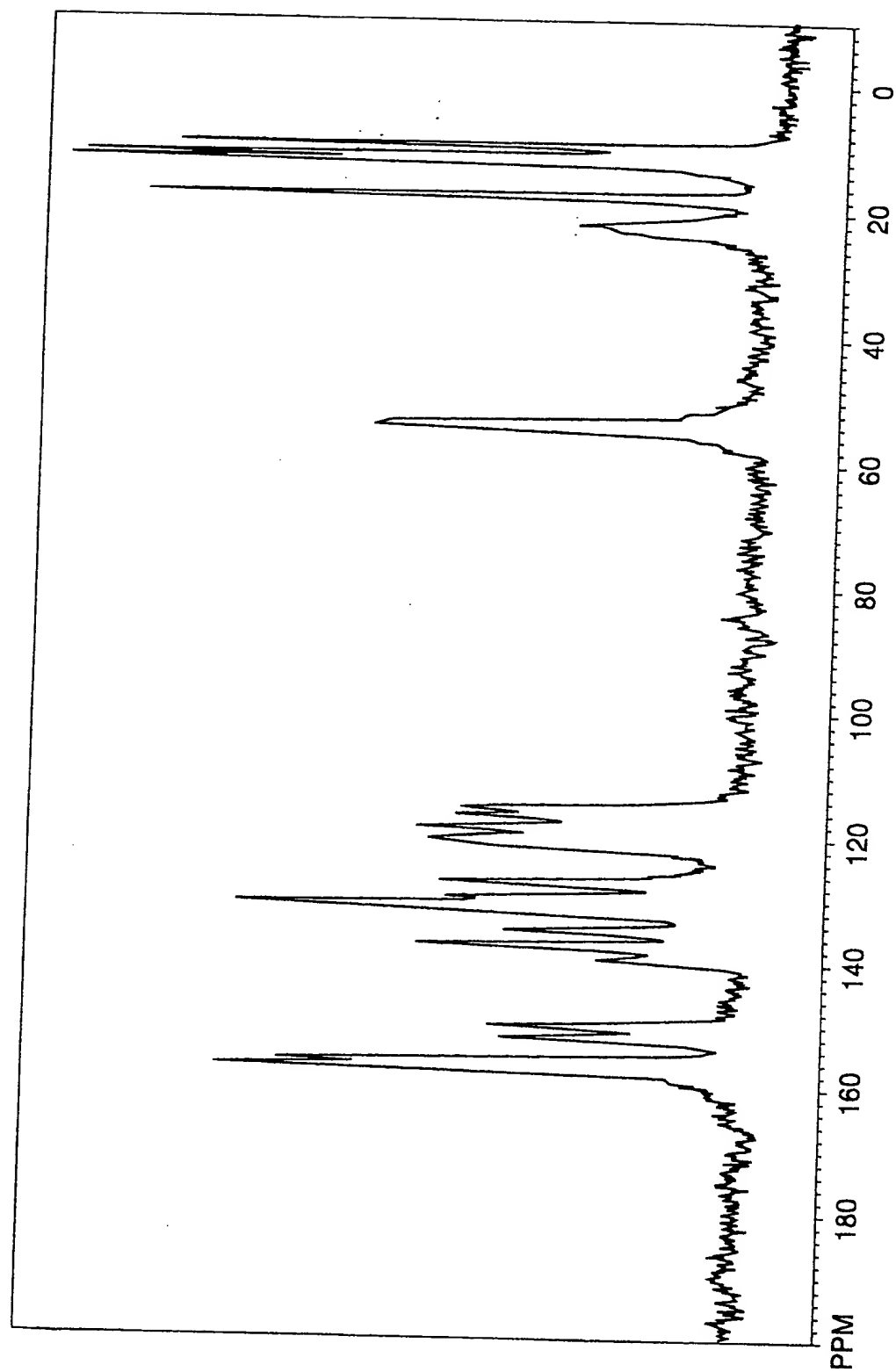


Figure 34

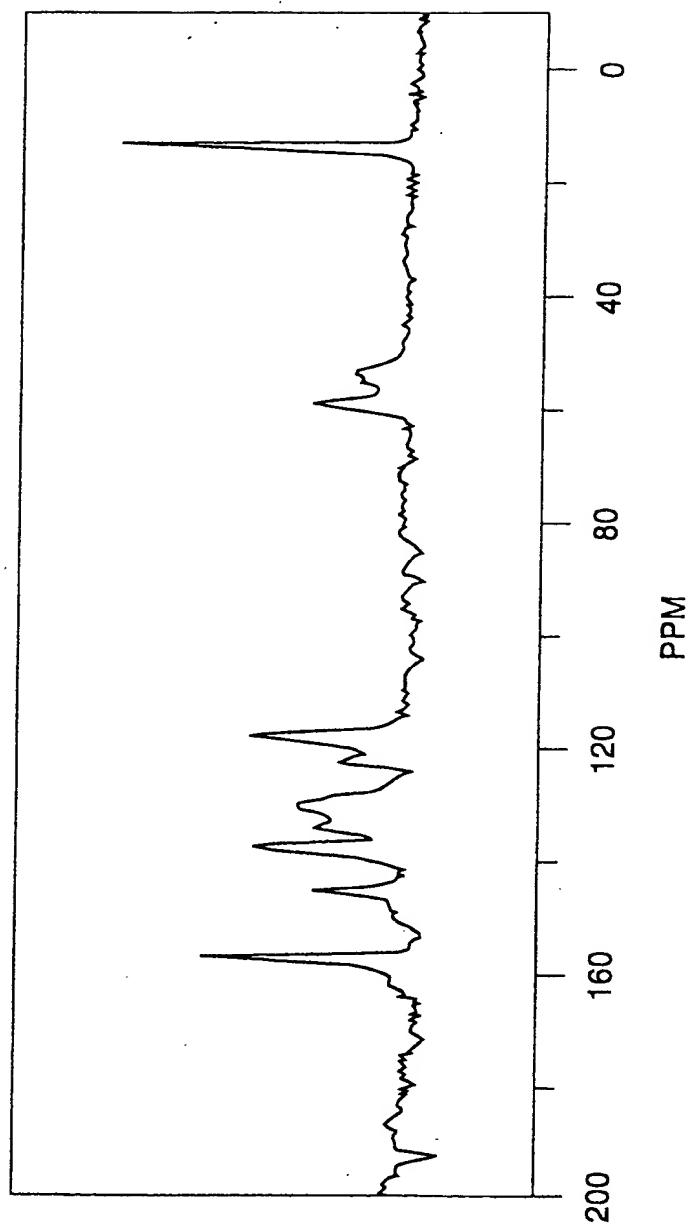


Figure 35

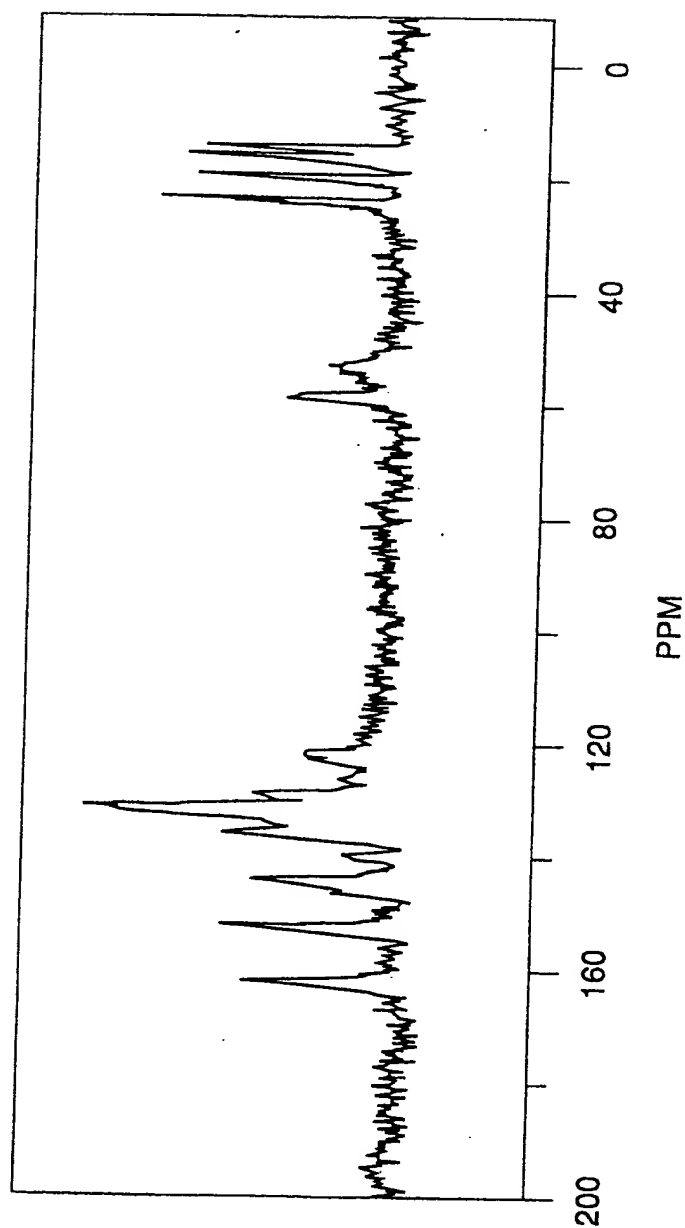


Figure 36

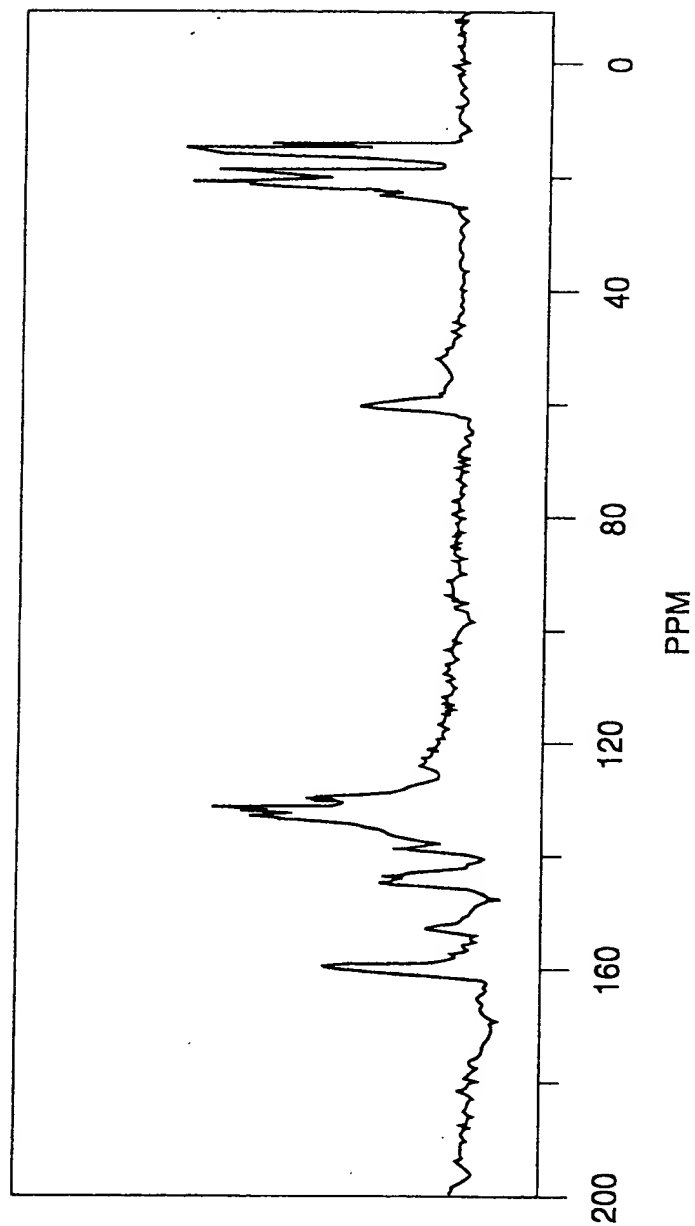
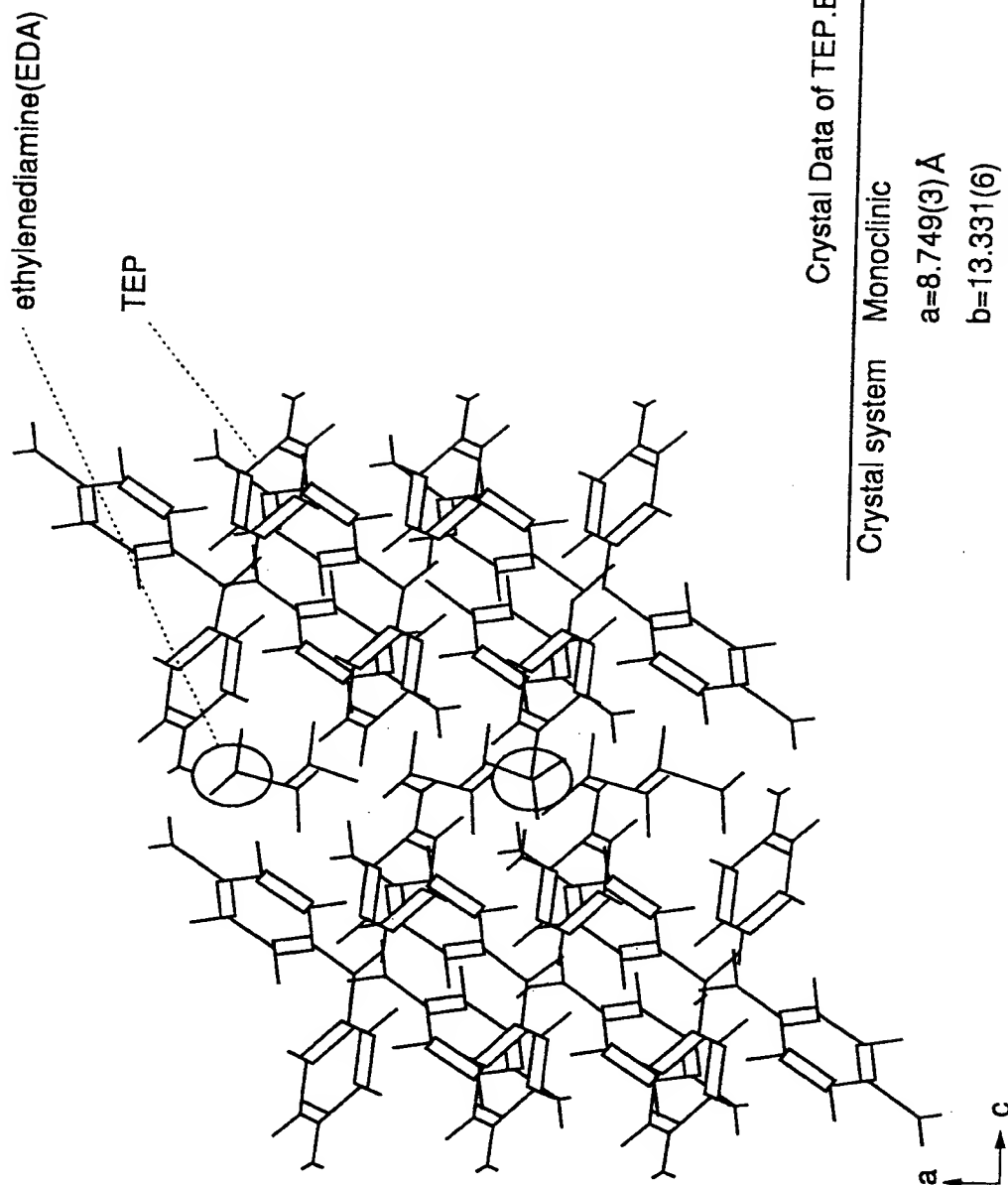


Figure 37



## Crystal Data of TEP·EDA (1:1)

| Crystal system | Monoclinic                      | $V=1218.0(2)\text{\AA}^3$ |
|----------------|---------------------------------|---------------------------|
|                | $a=8.749(3)\text{\AA}$          | Space Group $p2_1/c$      |
|                | $b=13.331(6)$                   | $z=2$                     |
|                | $c=10.989(9)$                   | $D_x=1250\text{g/cm}^3$   |
|                | $\beta=108.17(0)\text{degrees}$ | $R=0.038$                 |

Figure 38

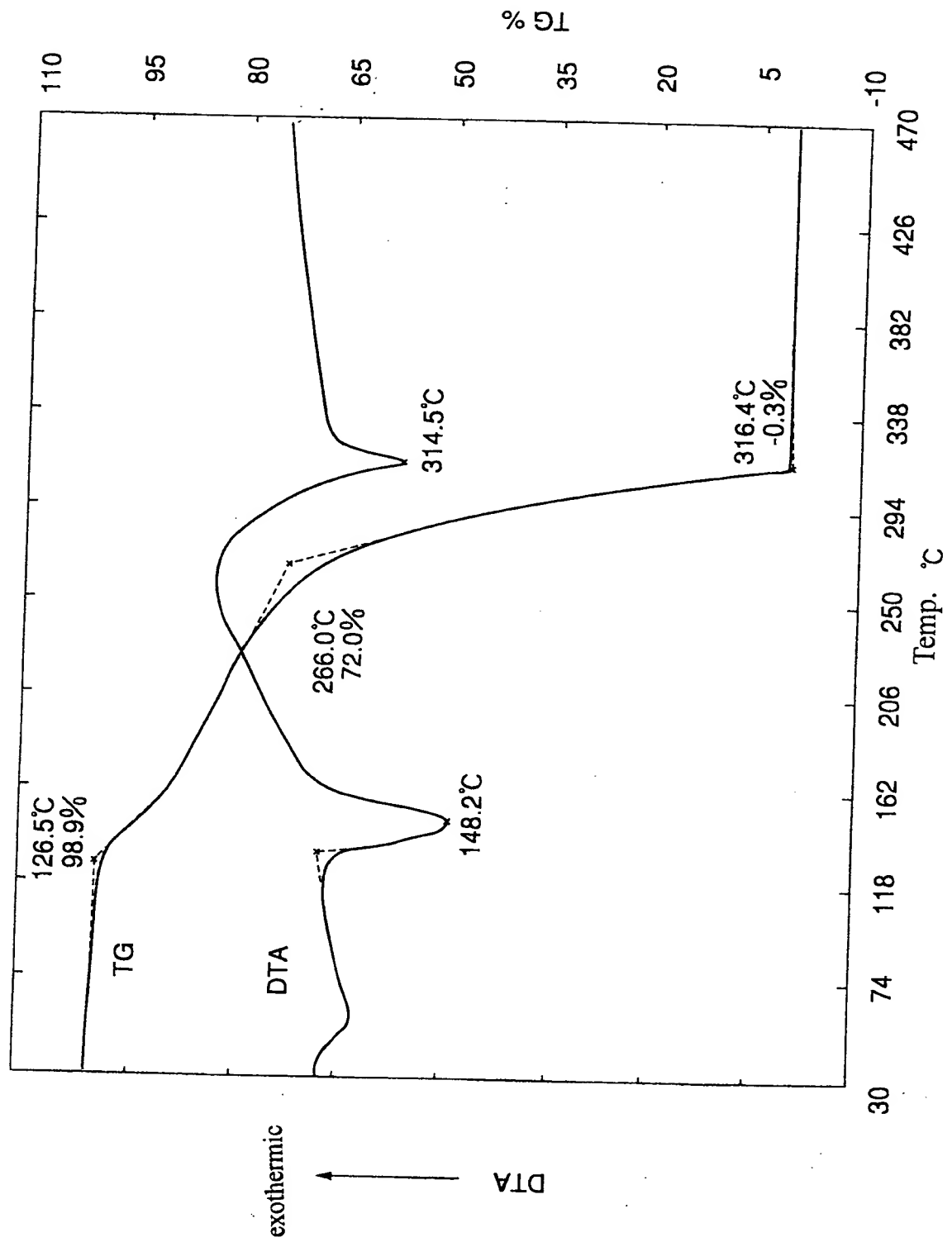


Figure 39

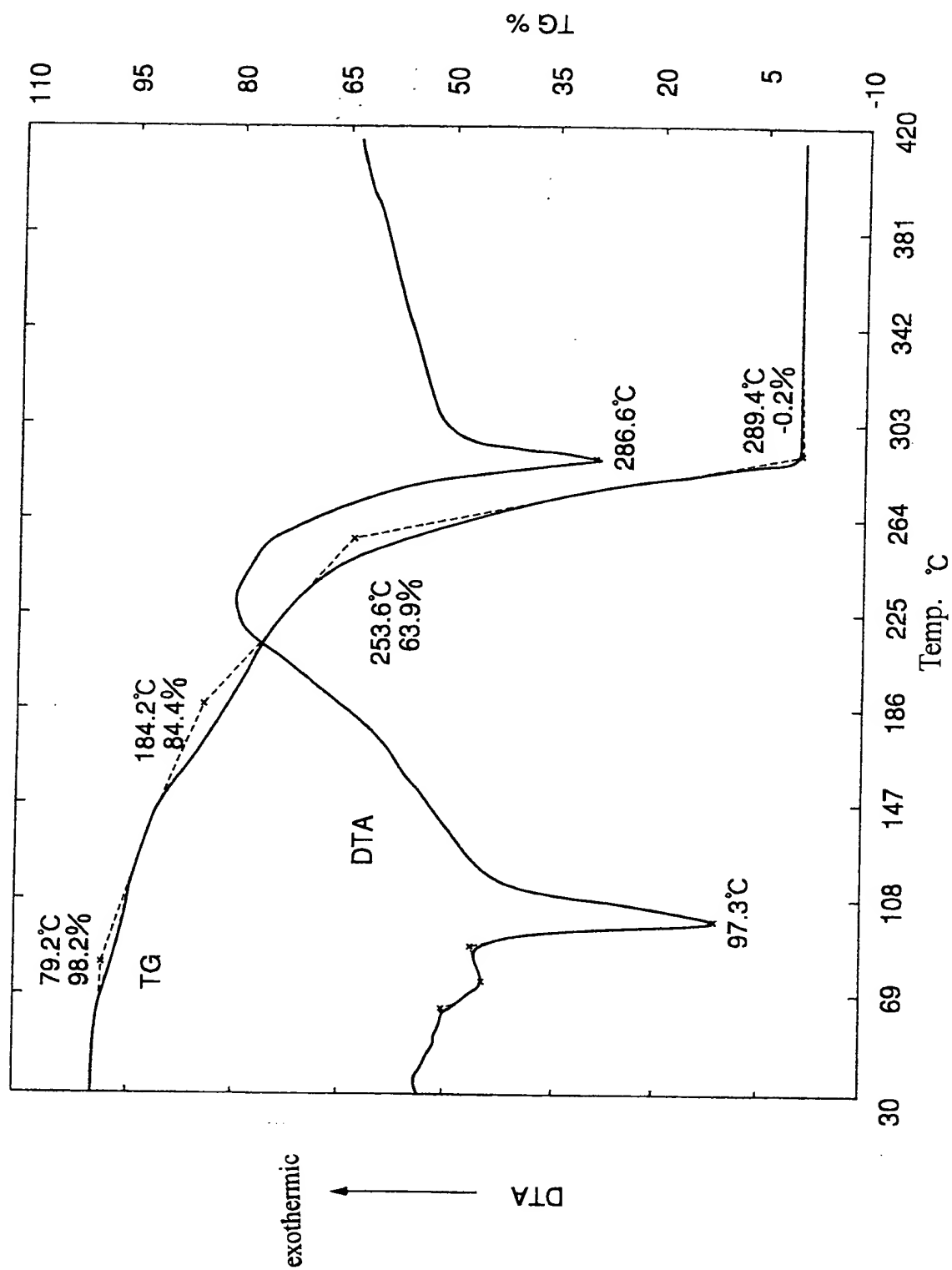


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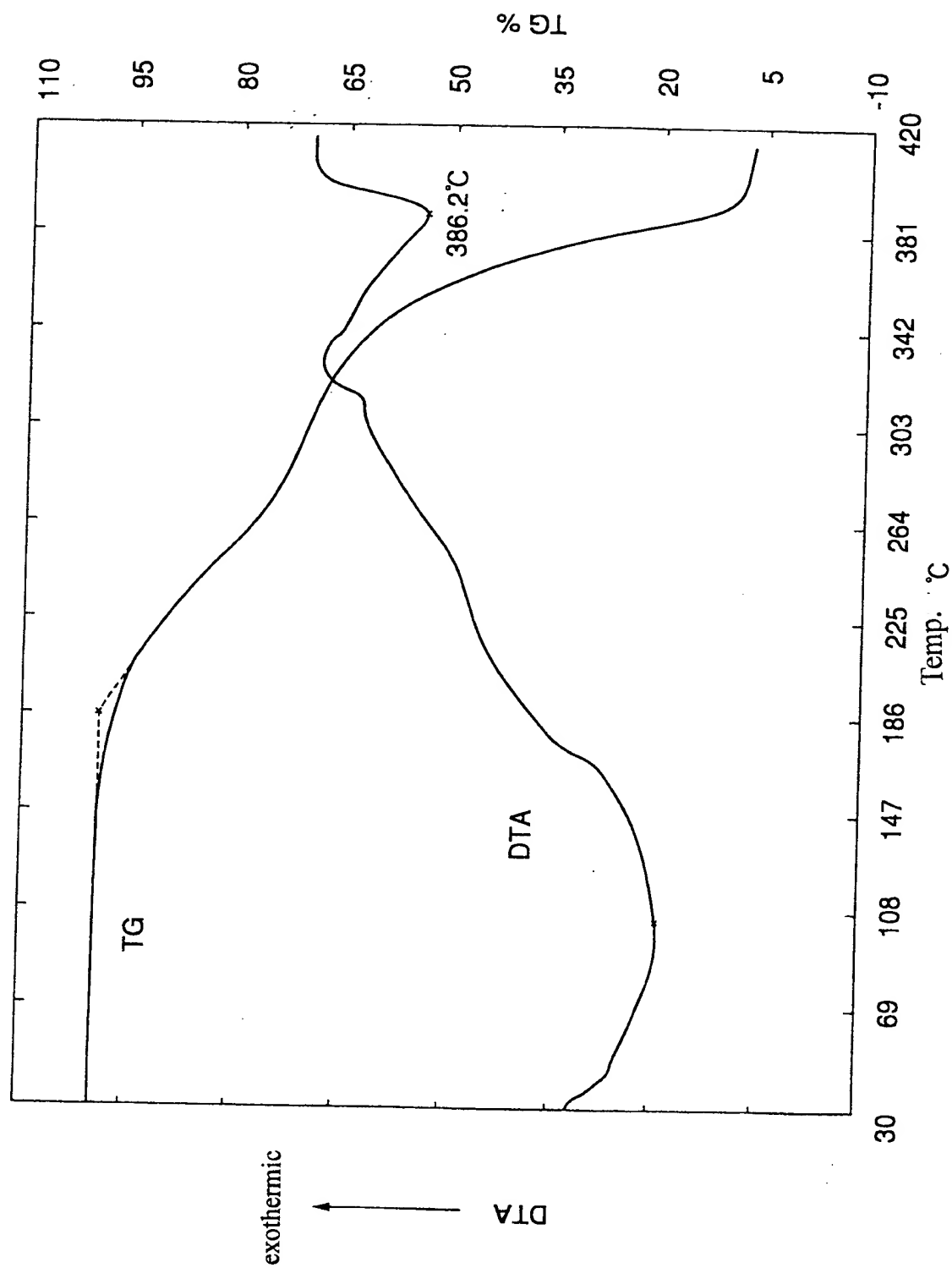




Figure 41

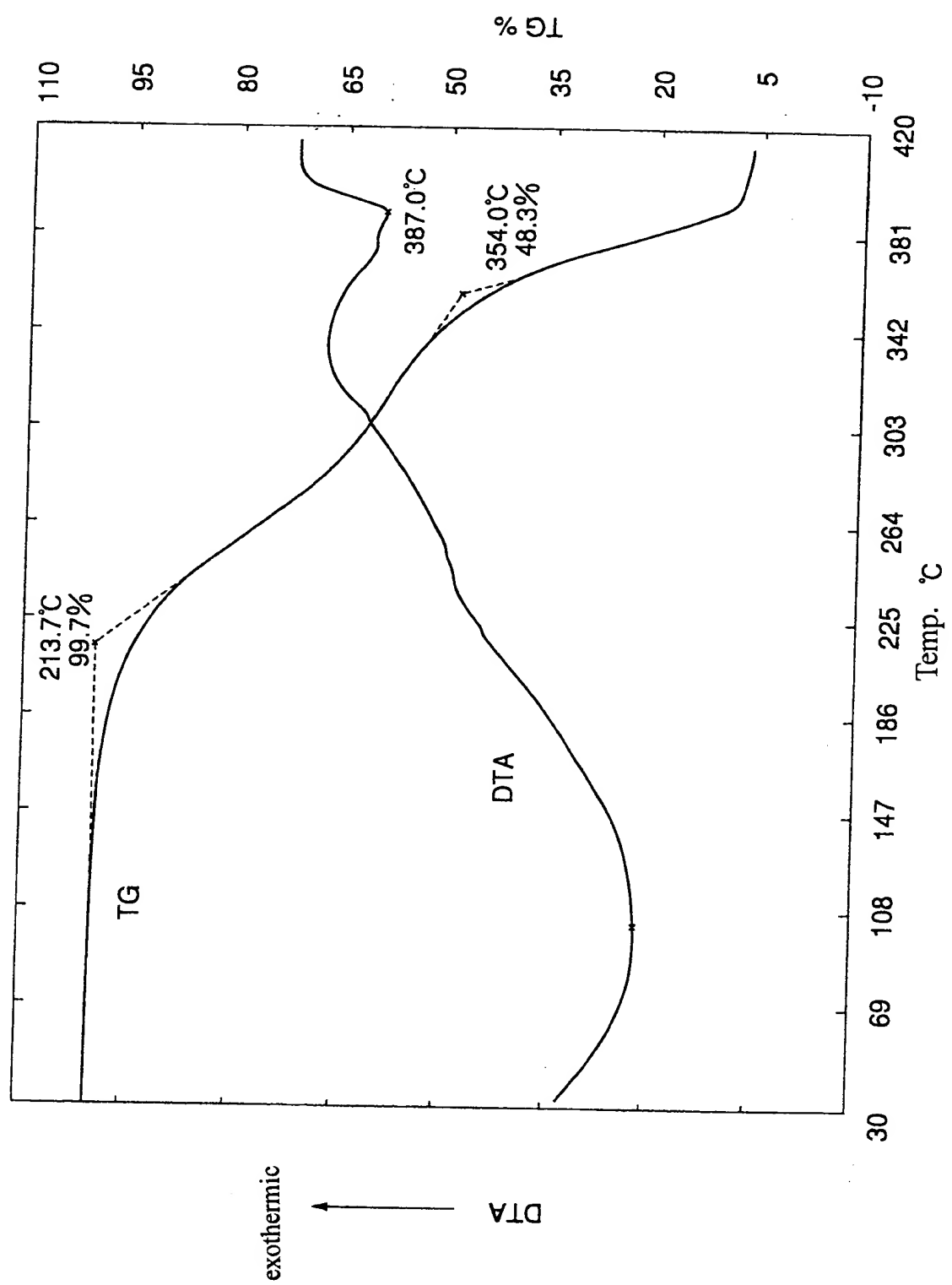


Figure 42

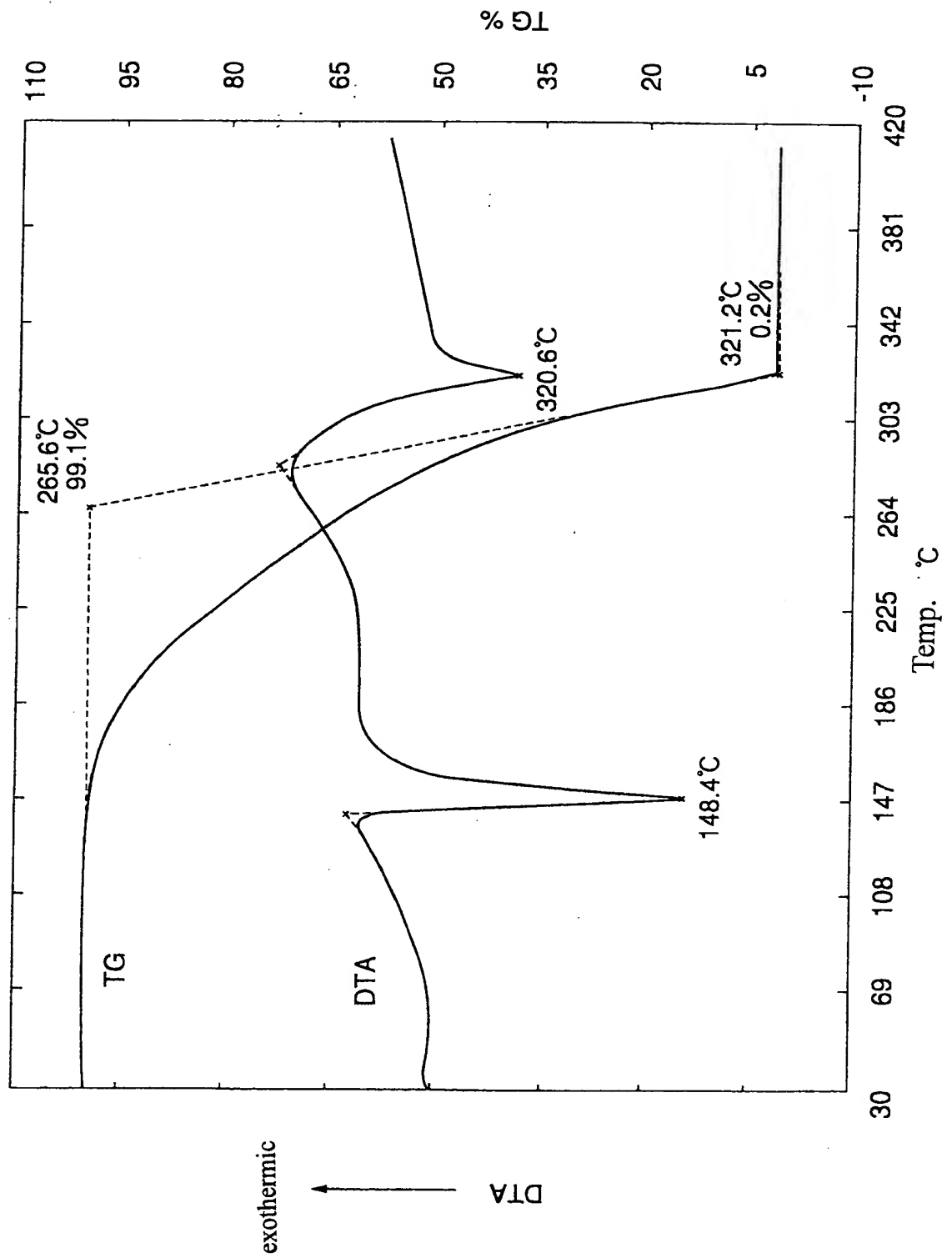


Figure 43

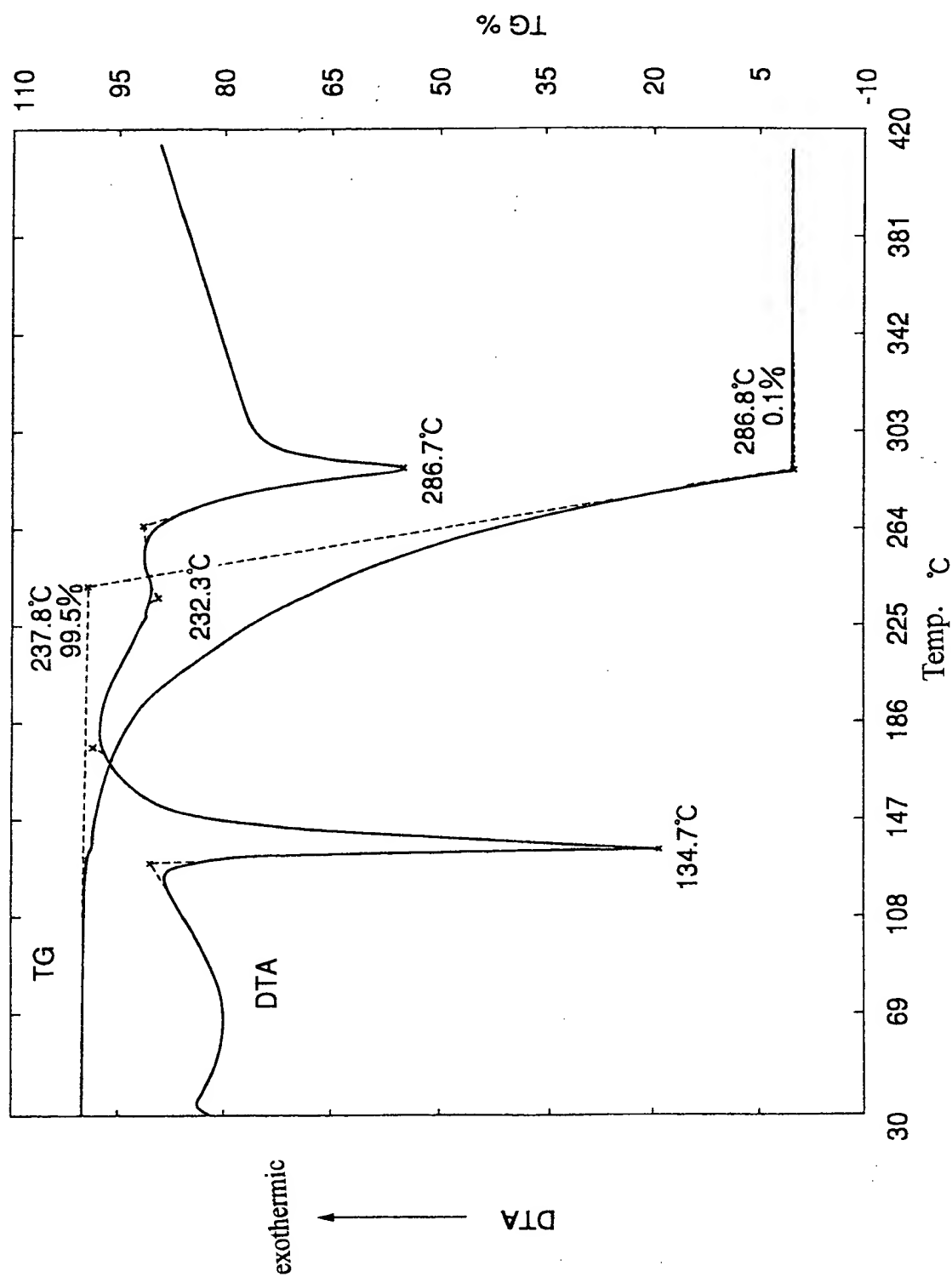


Figure 44

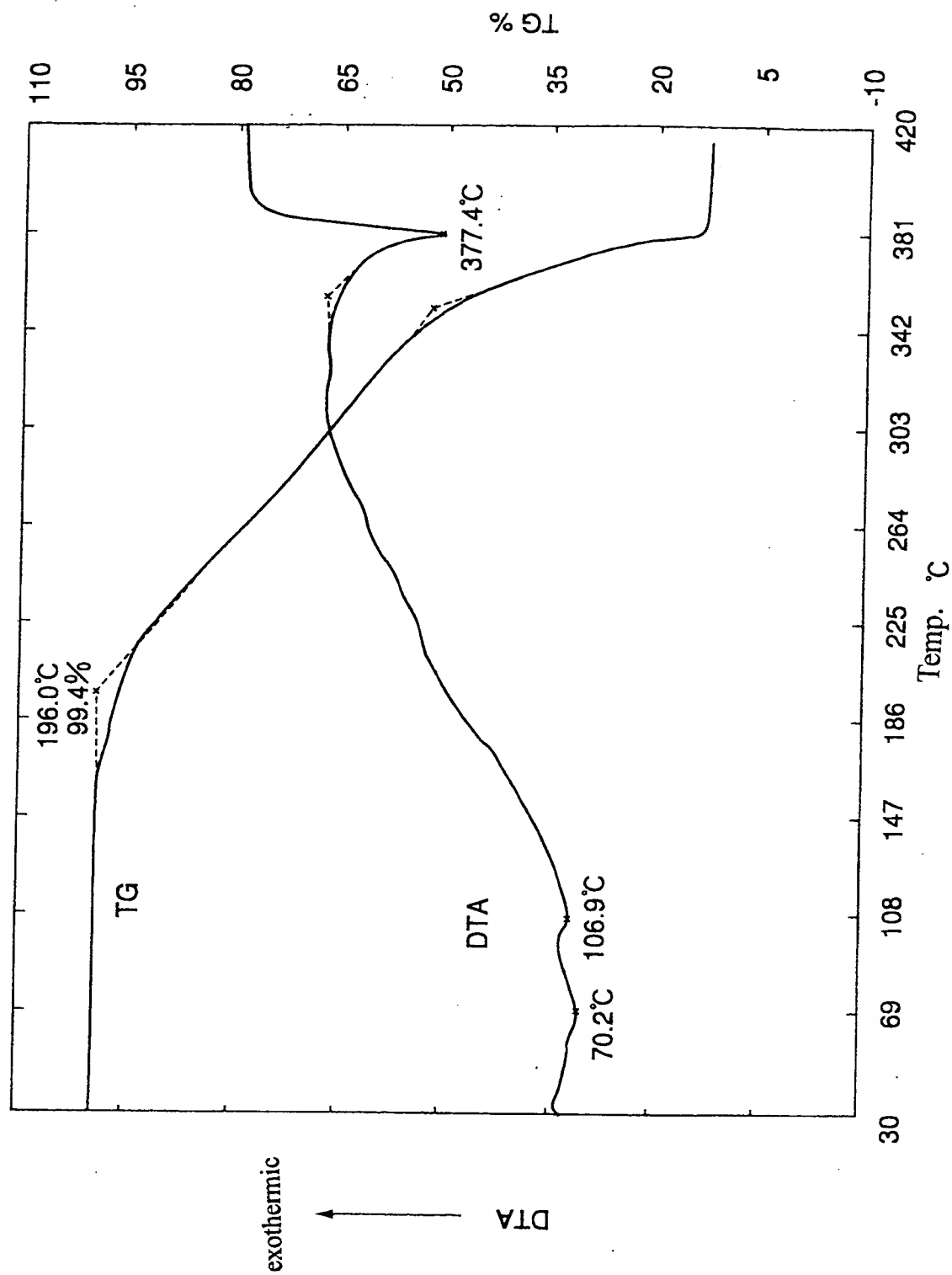




Figure 46

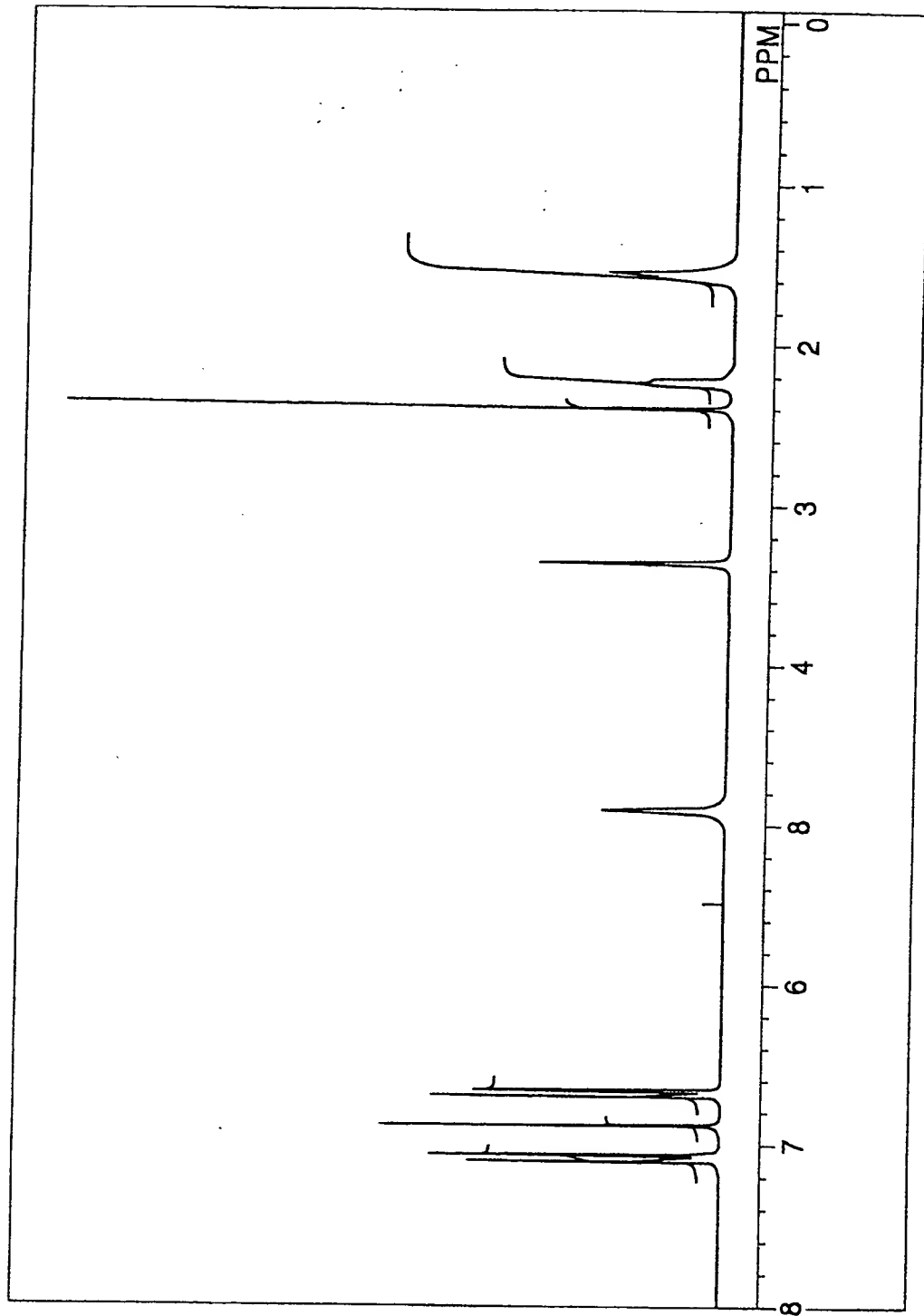


Figure 47

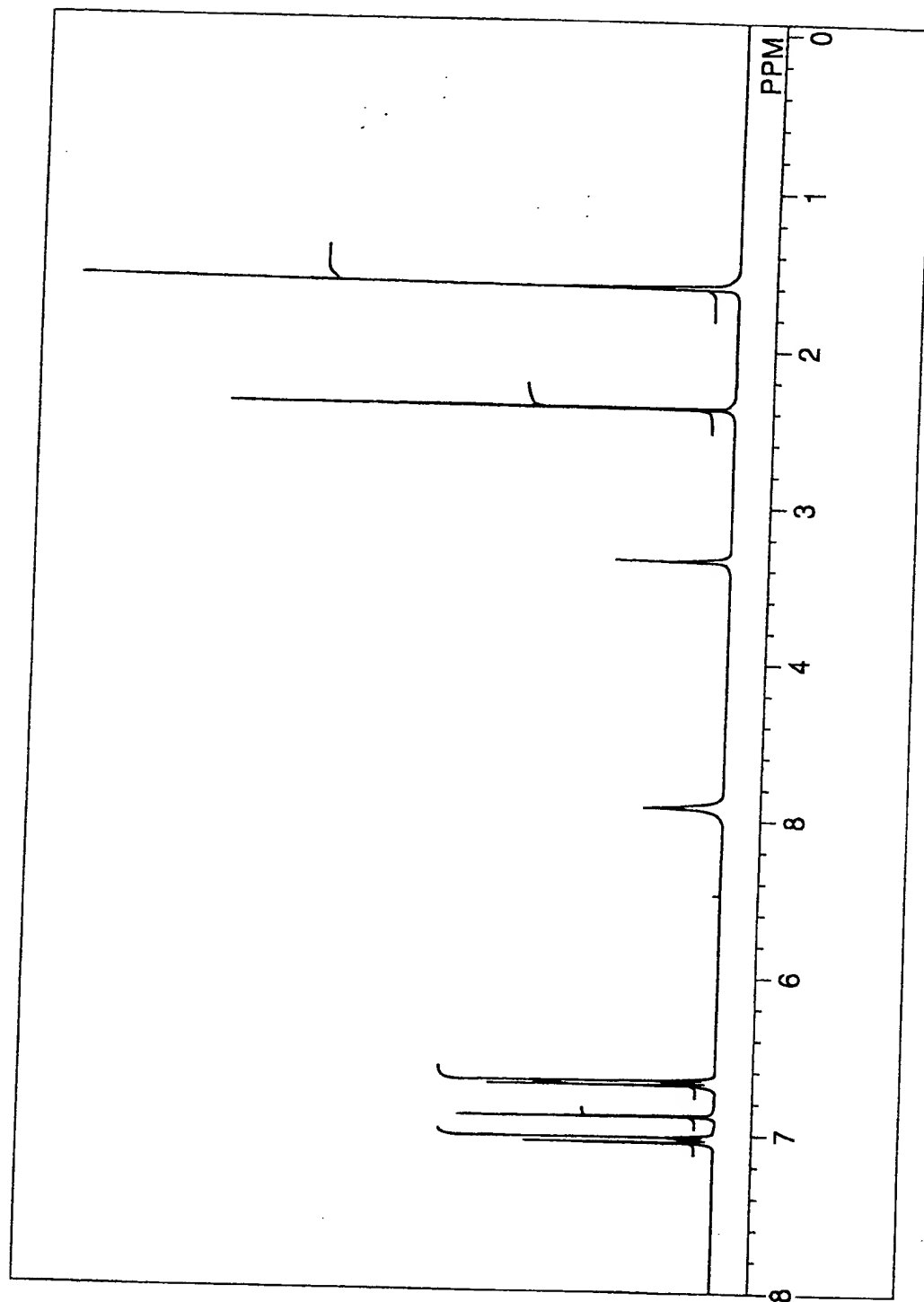


Figure 48

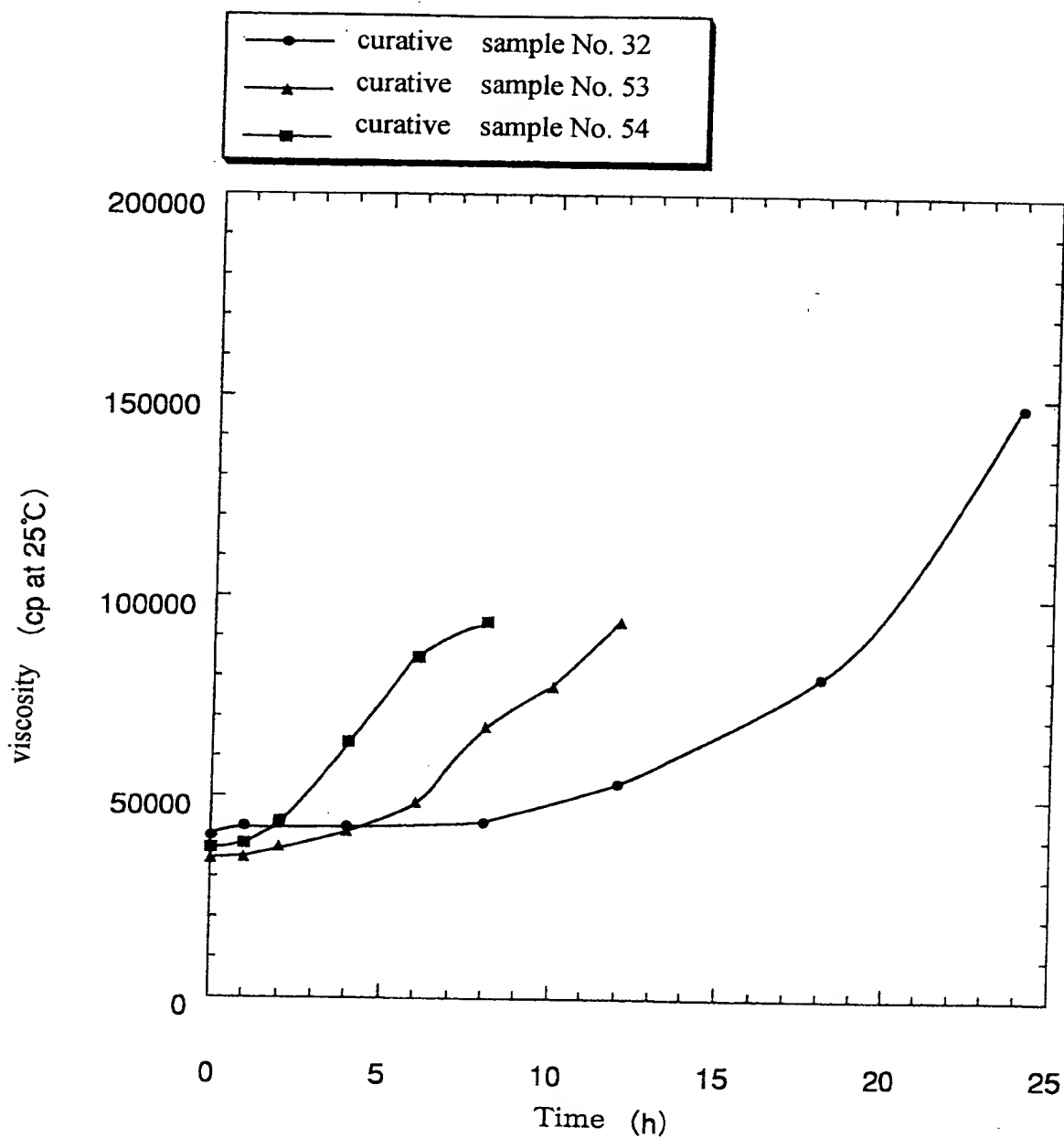




Figure 49

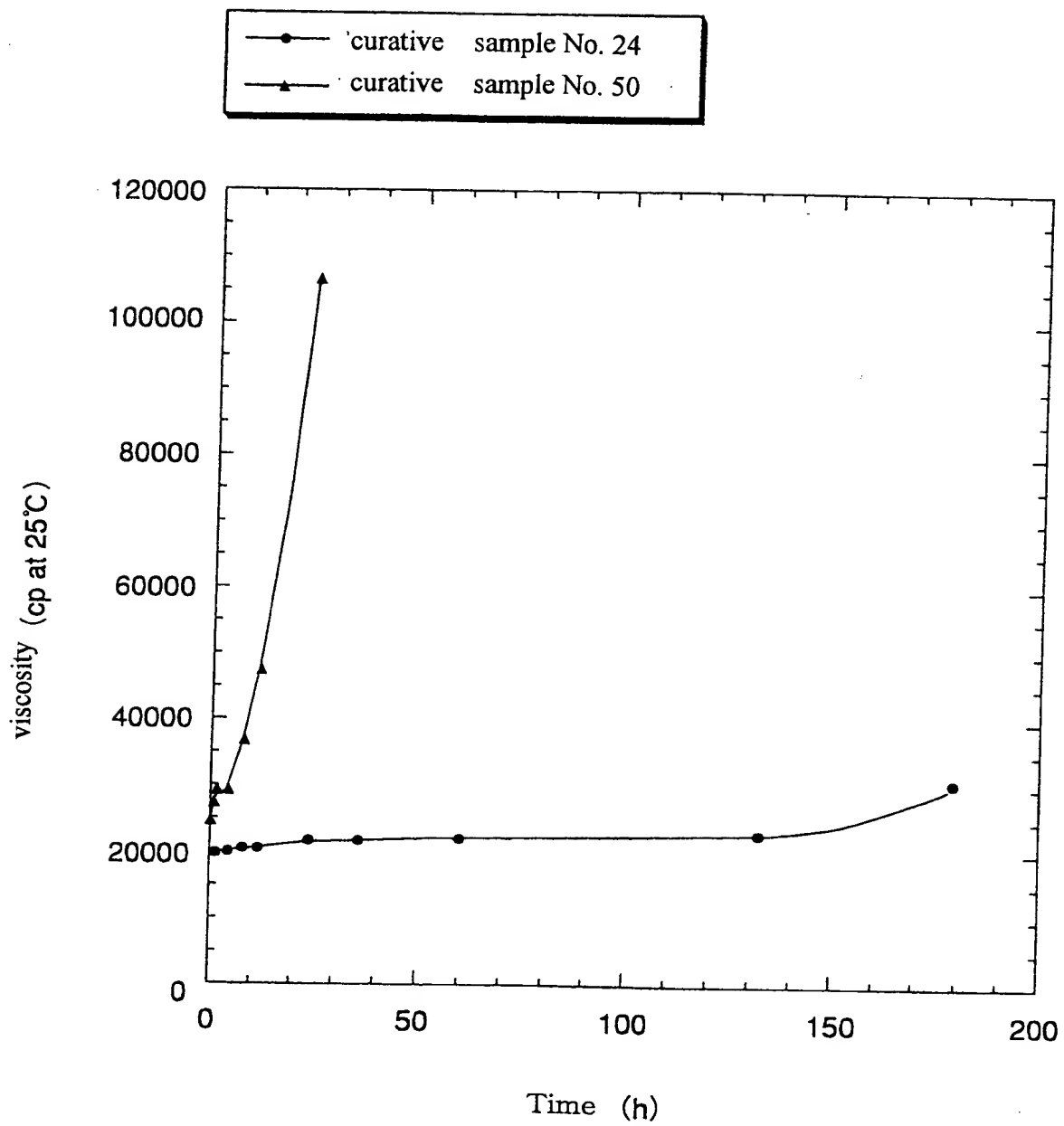


Figure 50

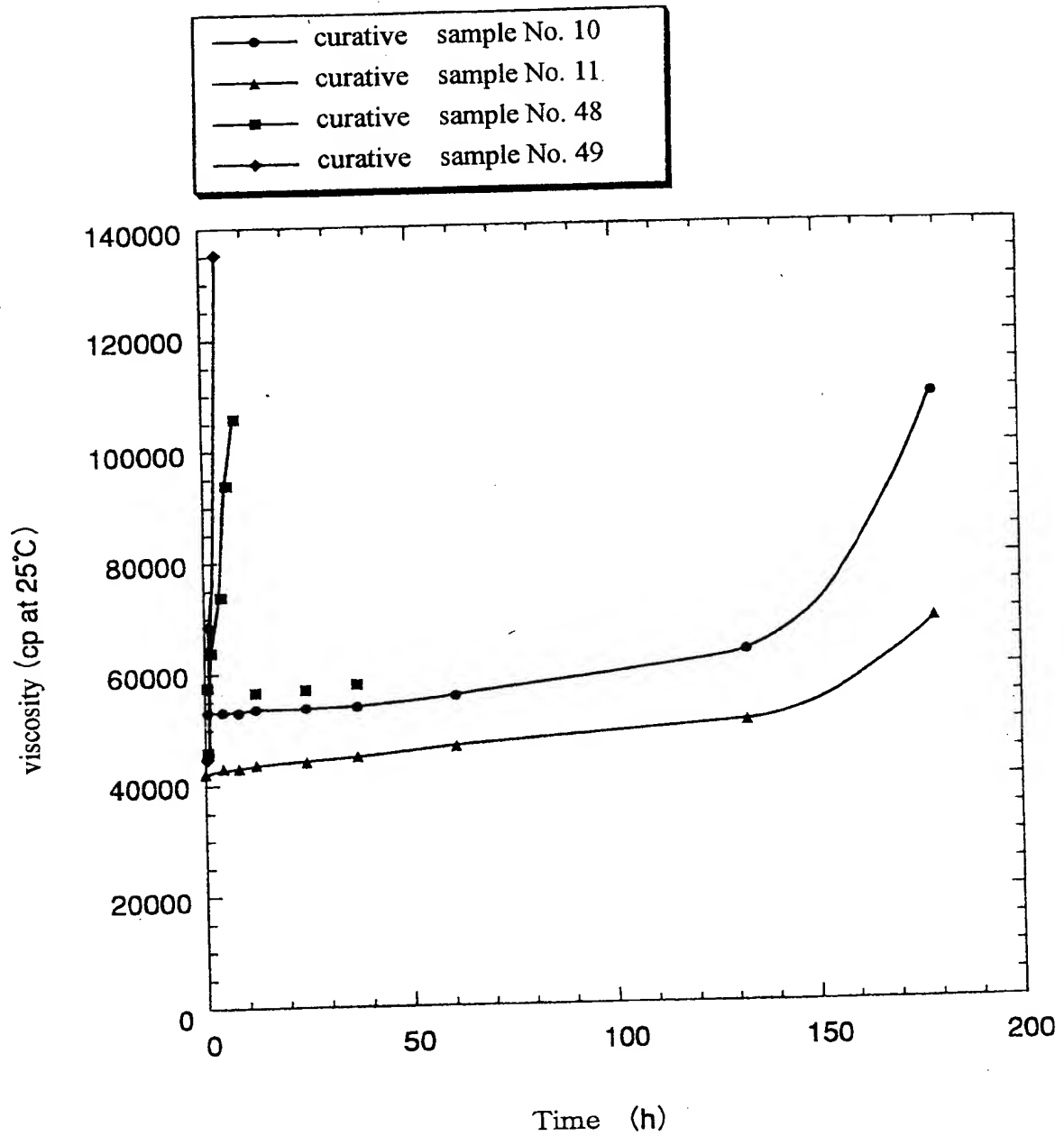


Figure 51

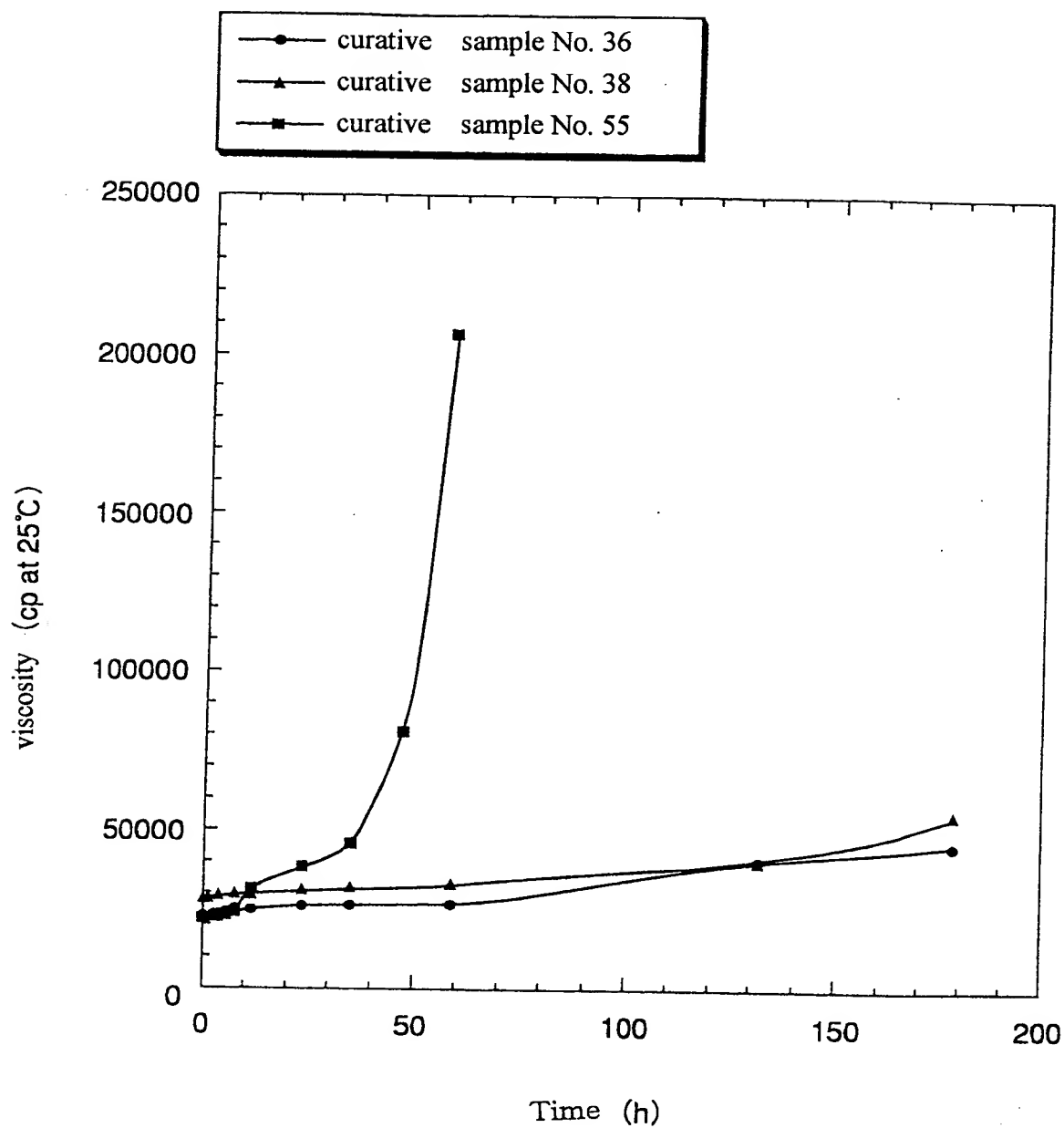


Figure 52

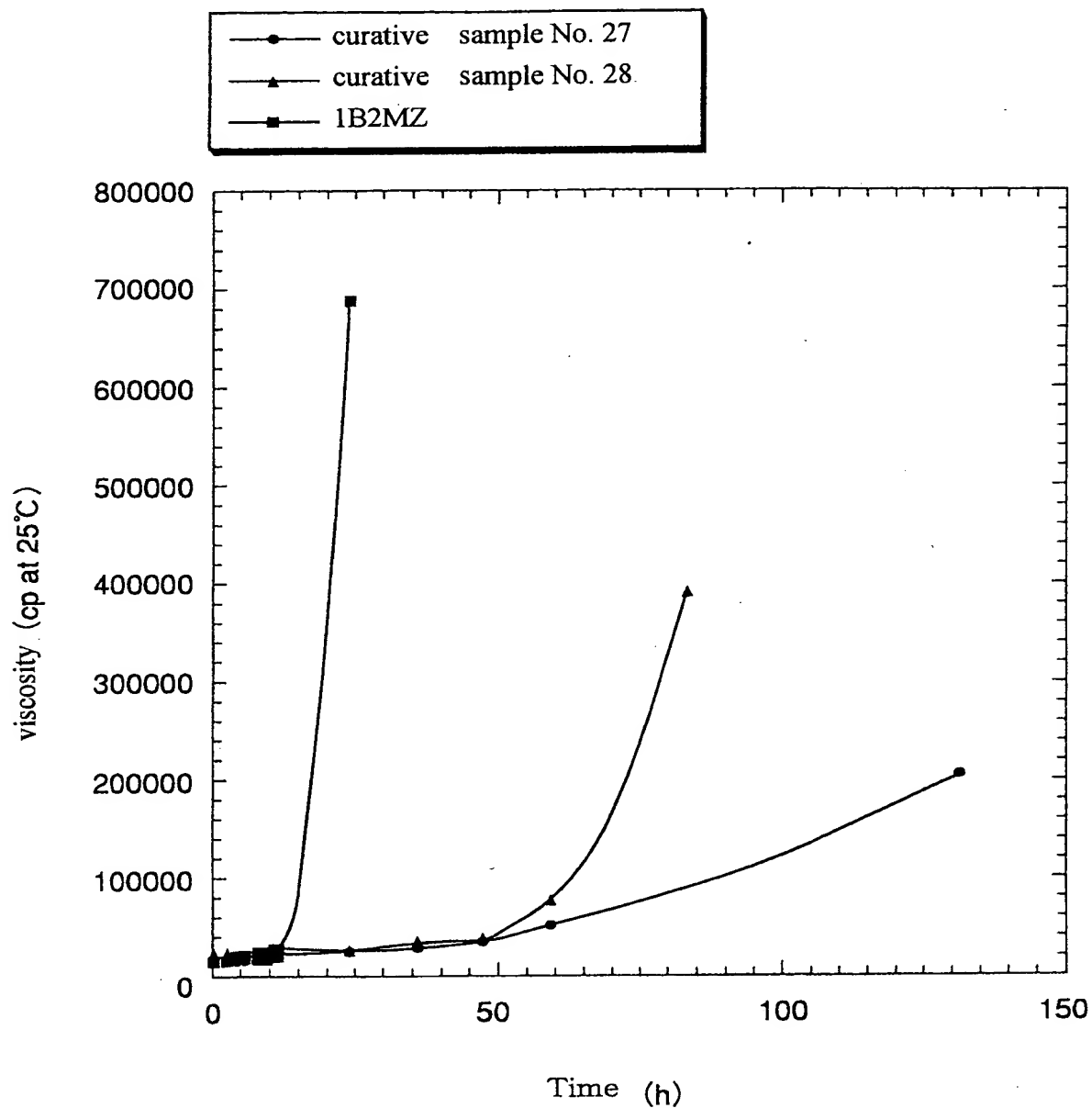


Figure 53

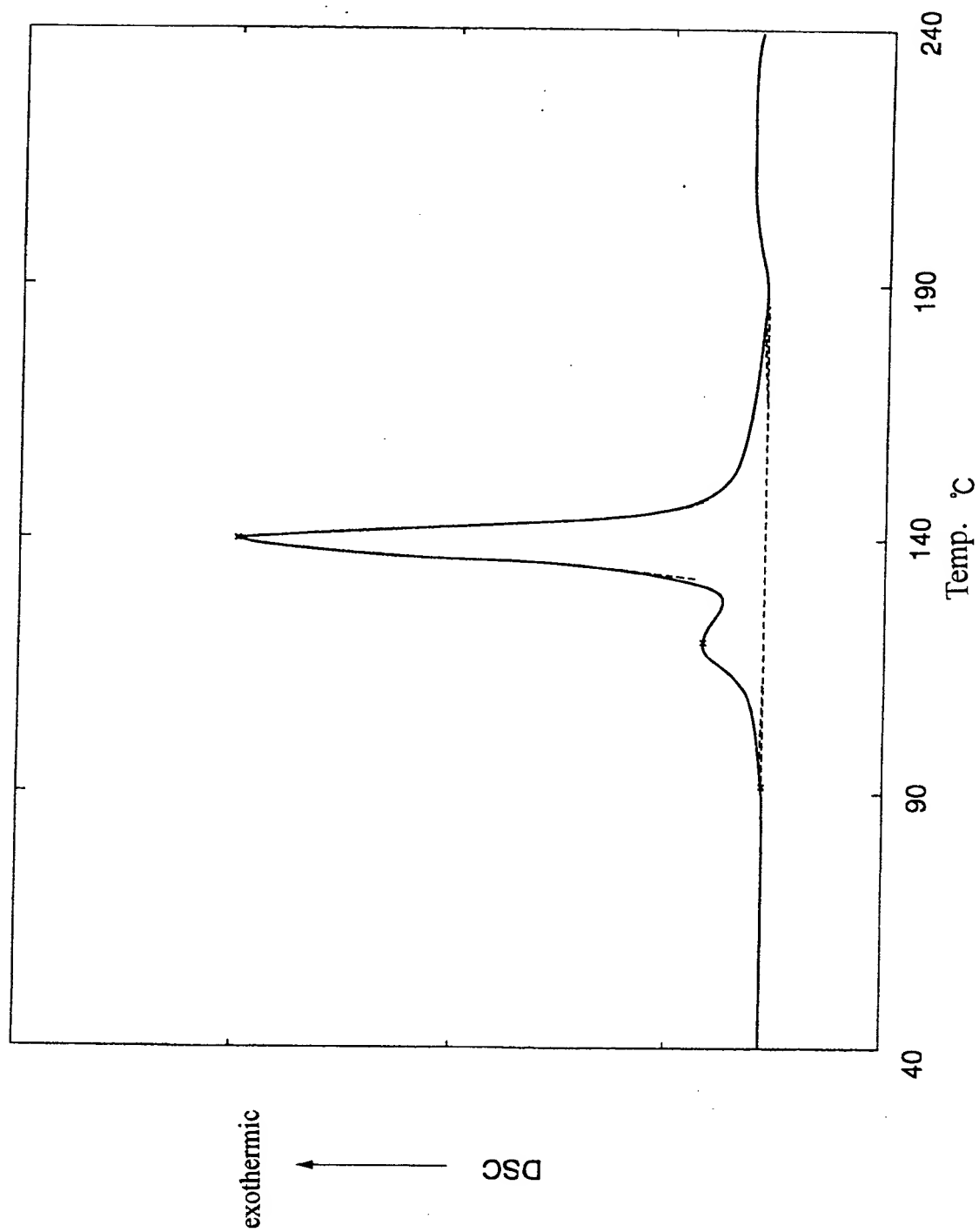


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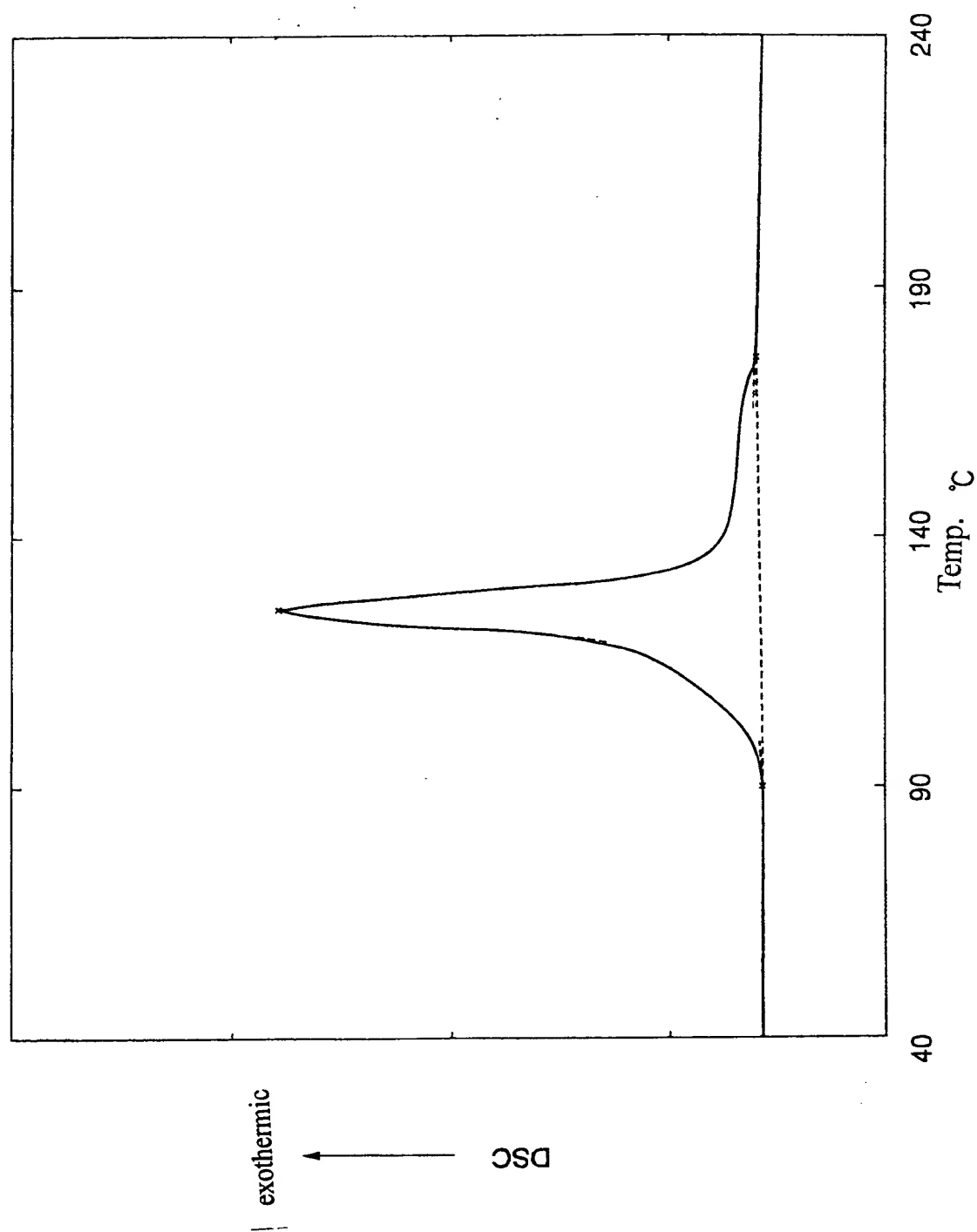


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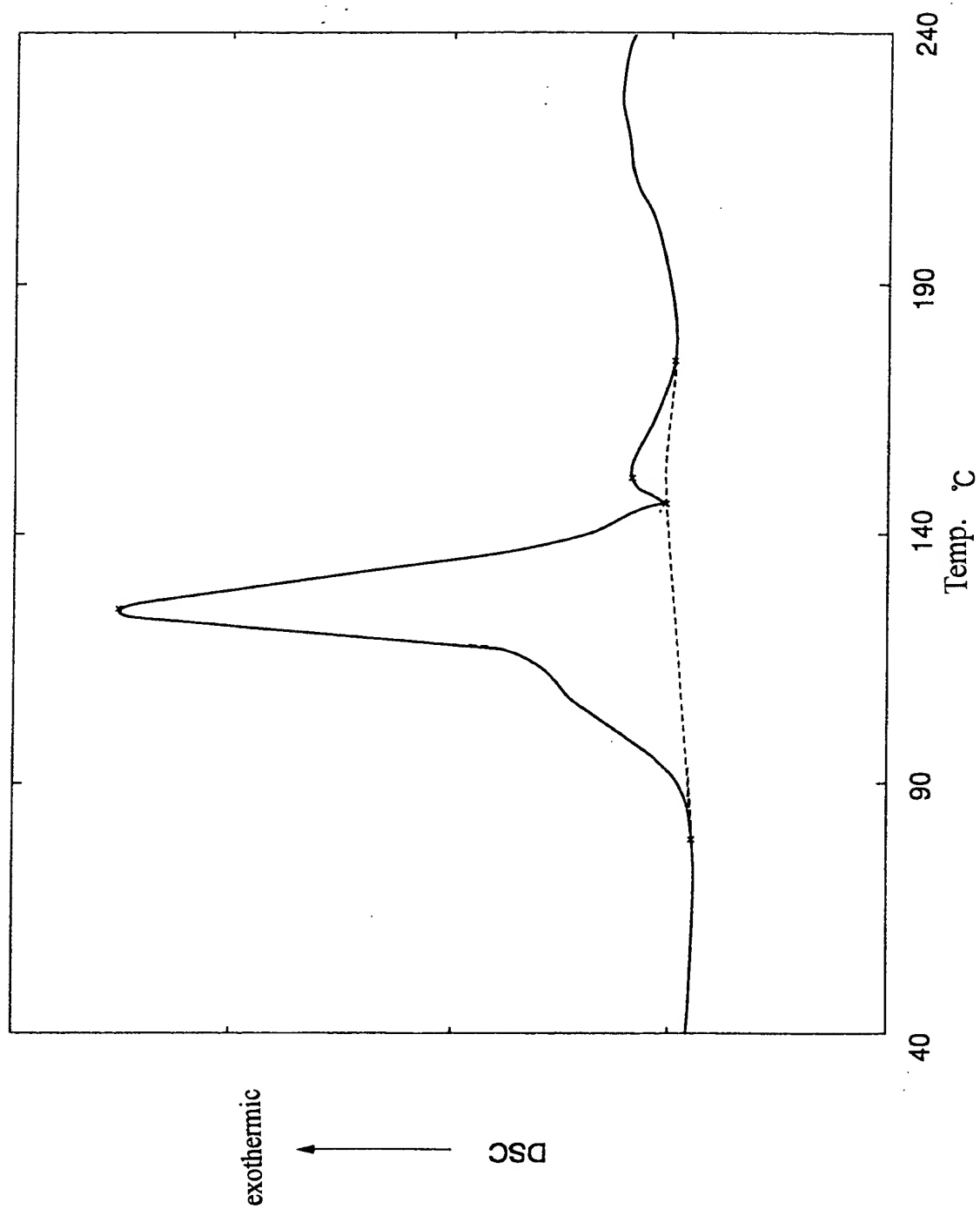


Figure 56

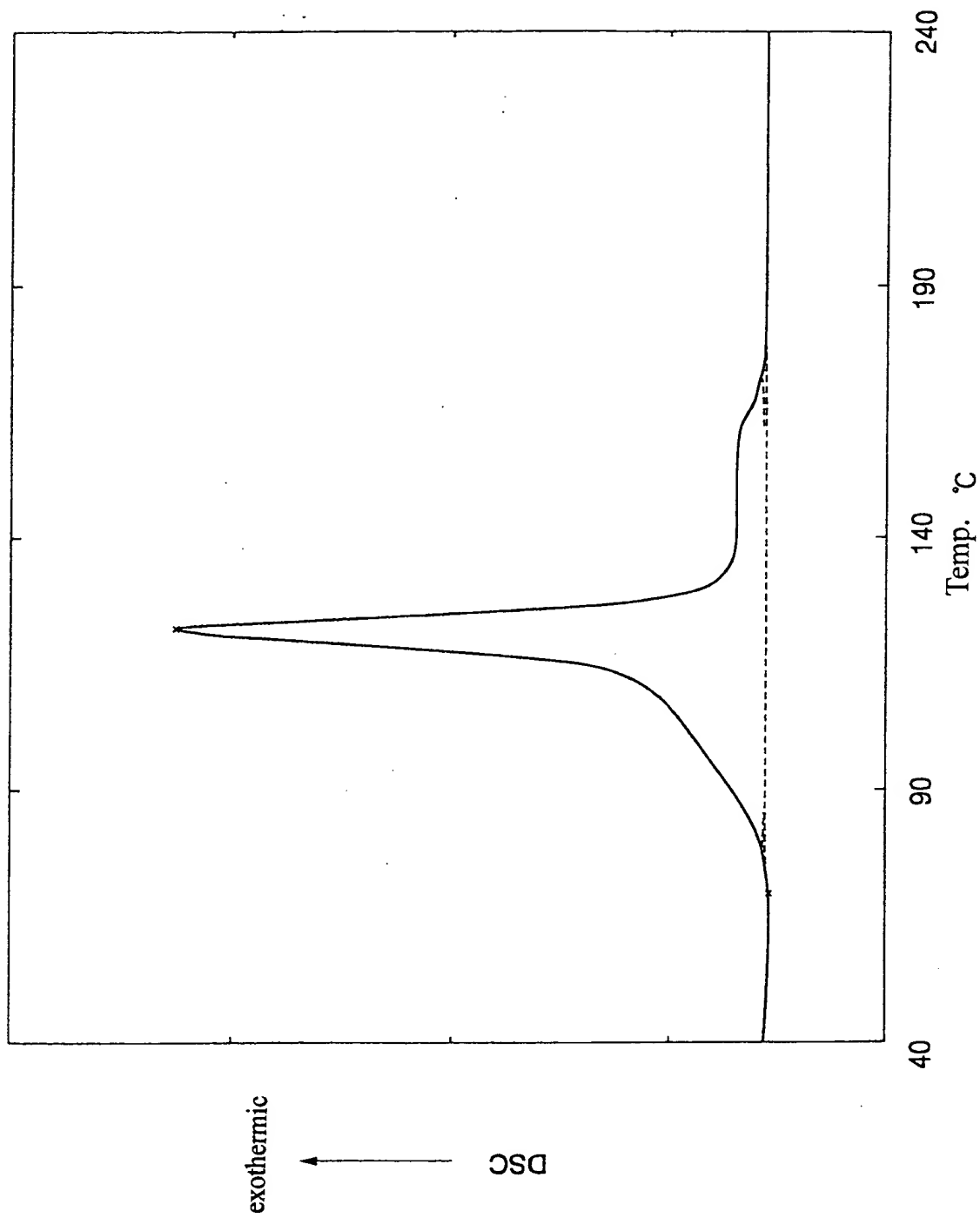




Figure 57

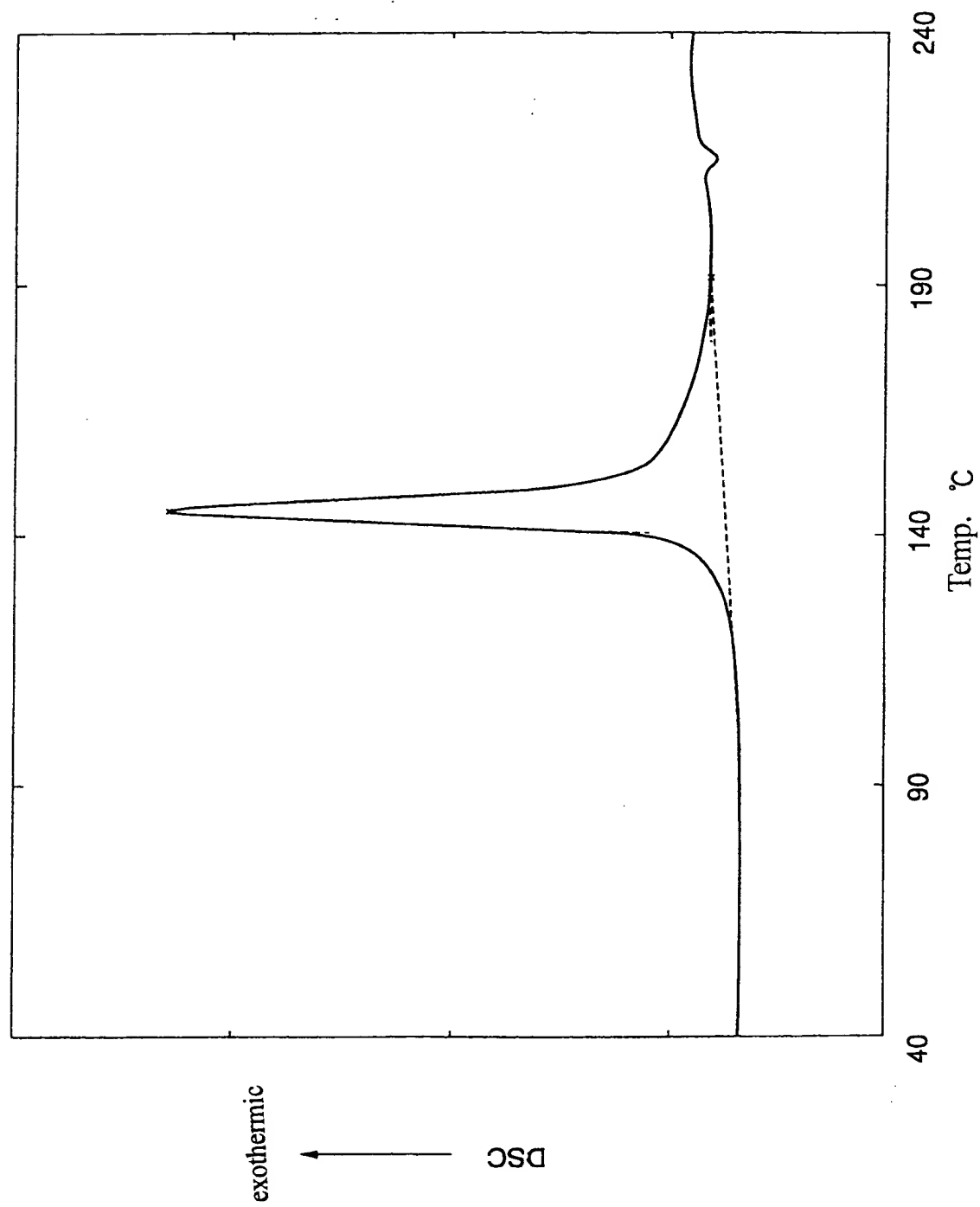
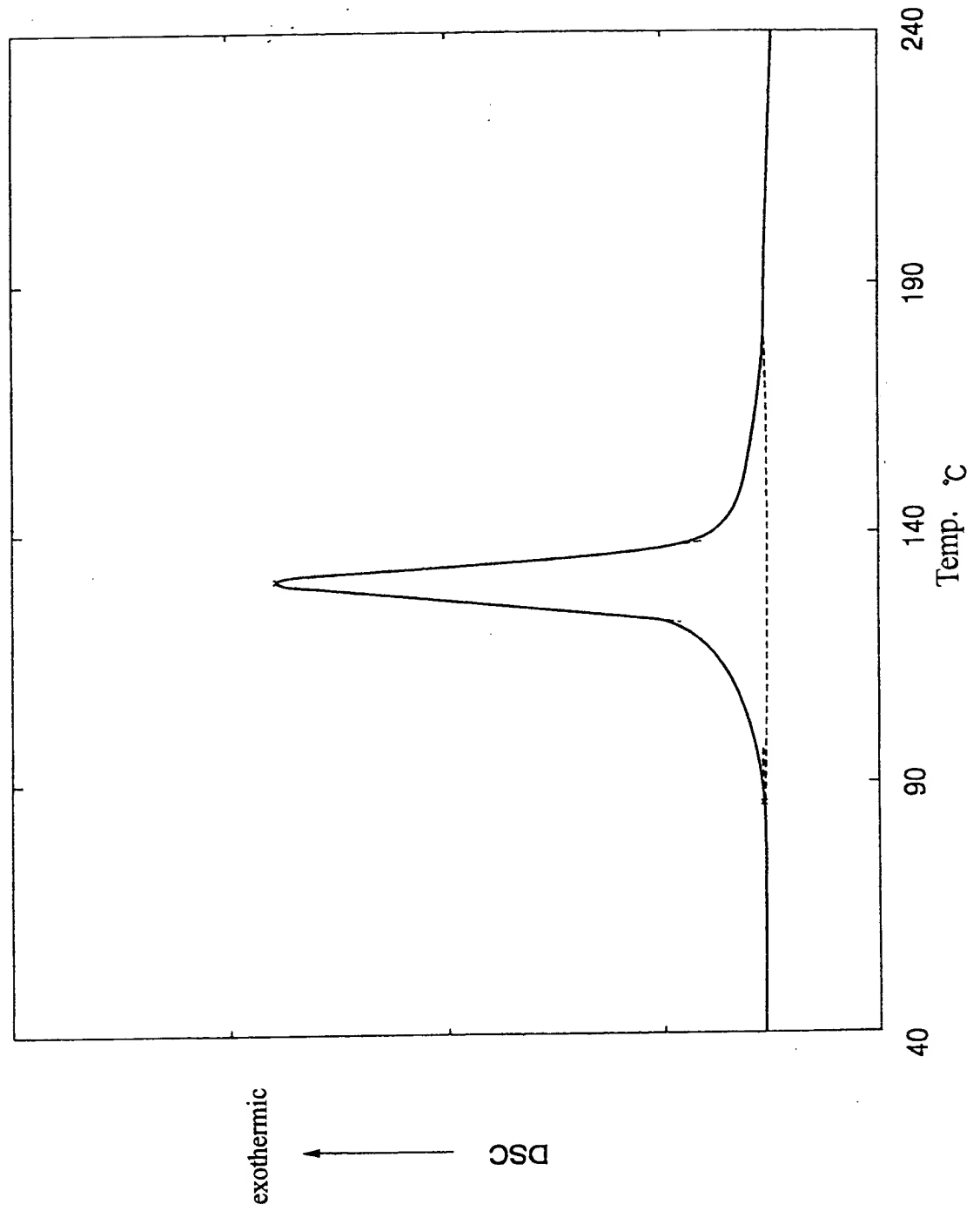


Figure 58



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Figure 59

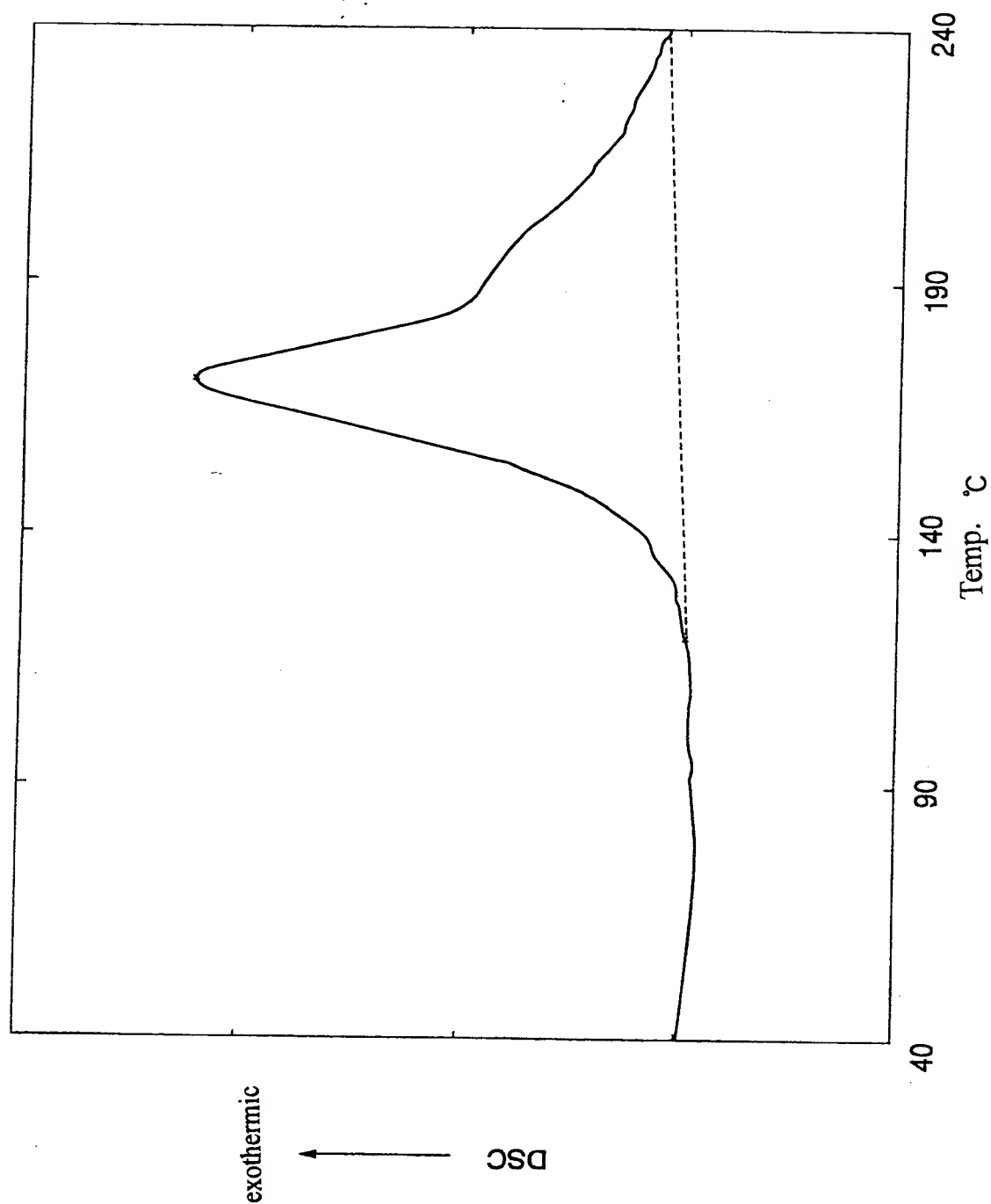


Figure 60

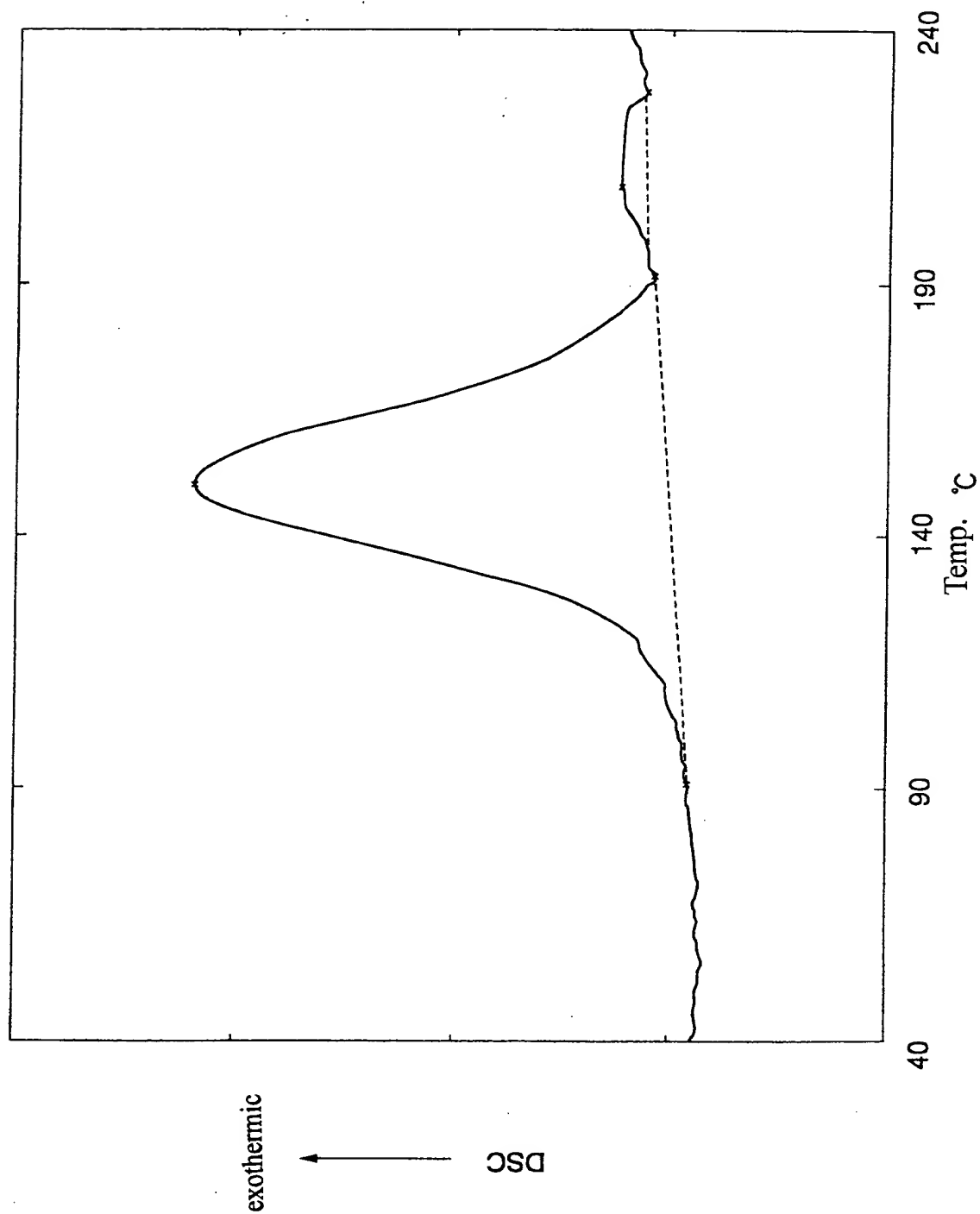


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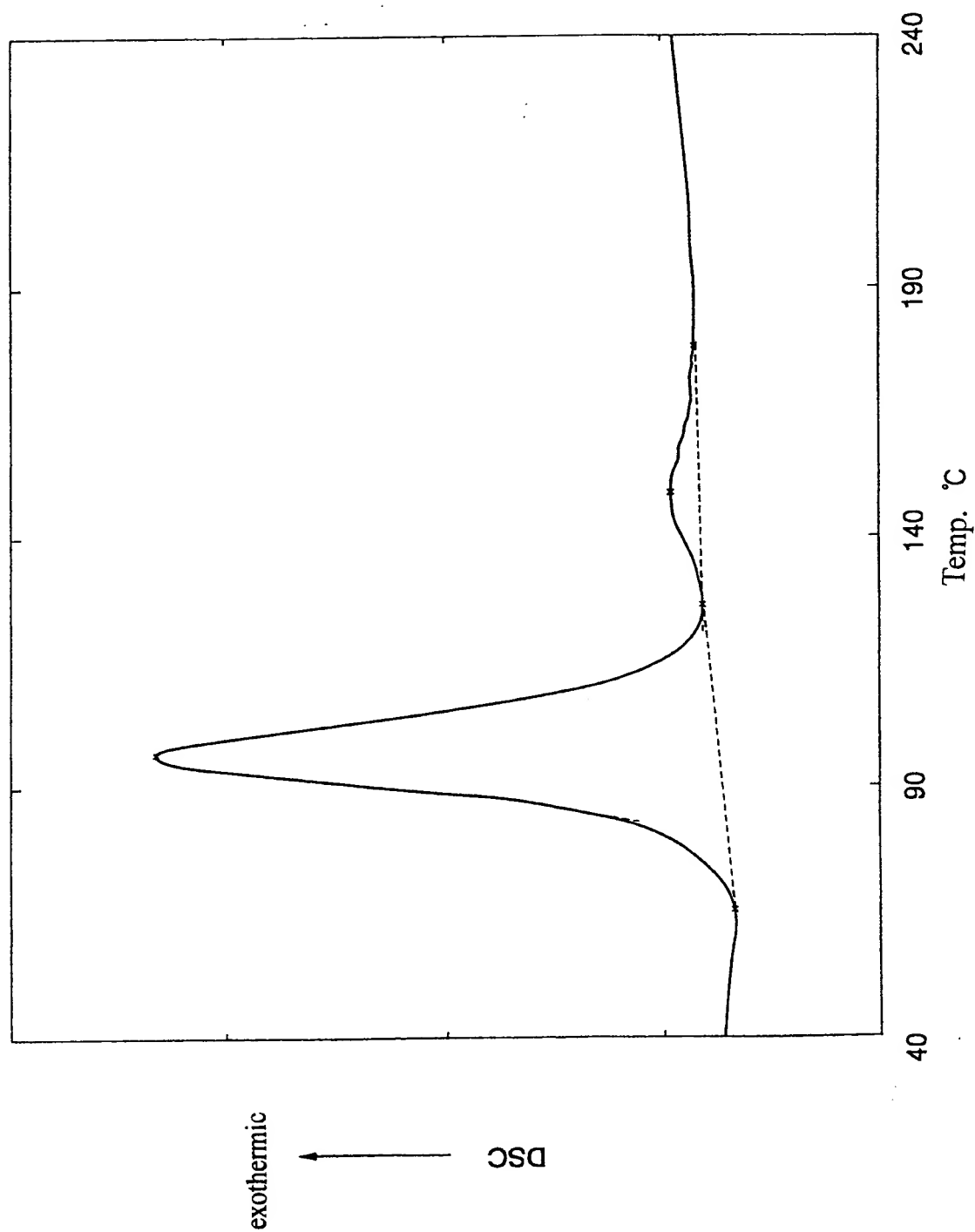


Figure 62

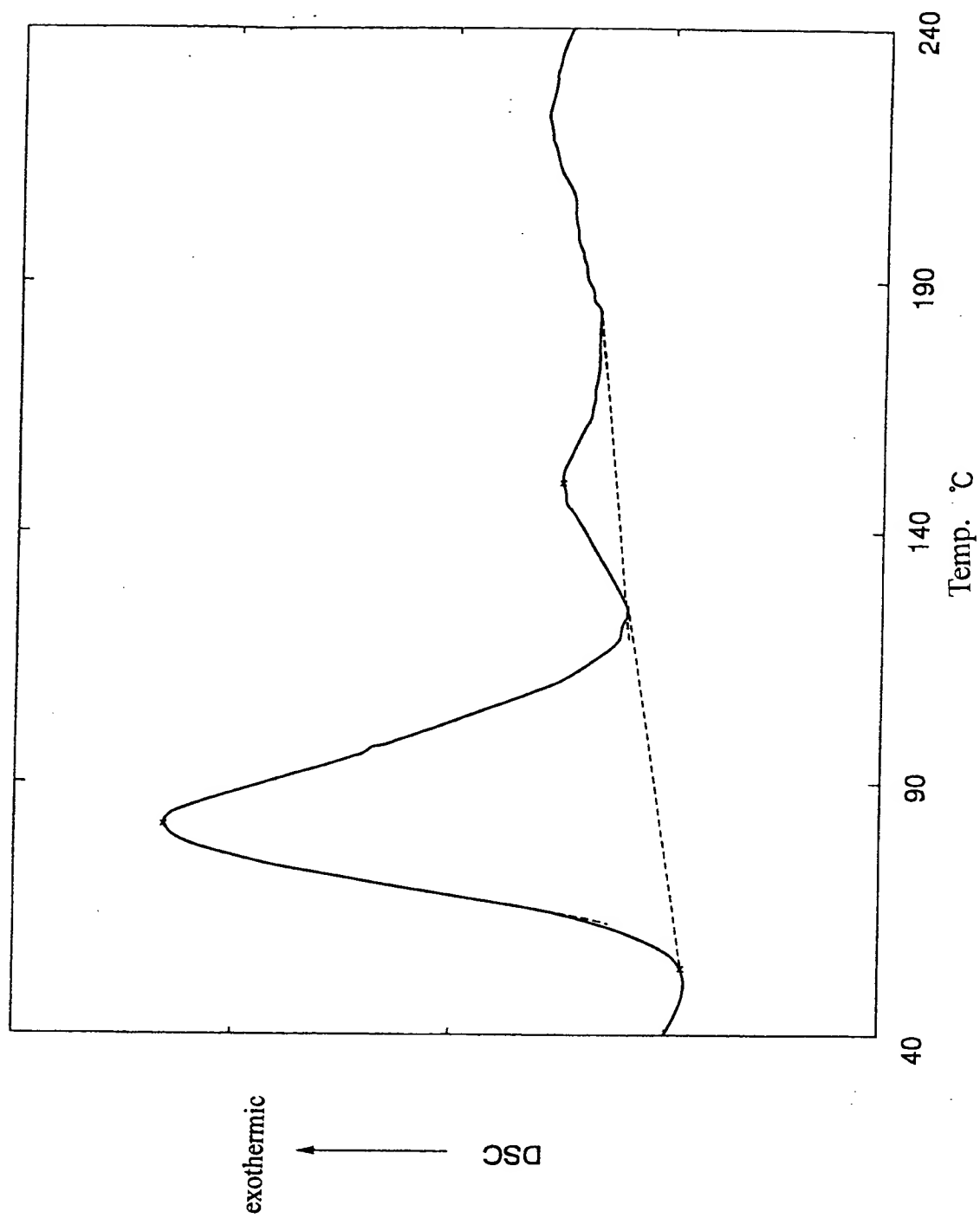


Figure 63

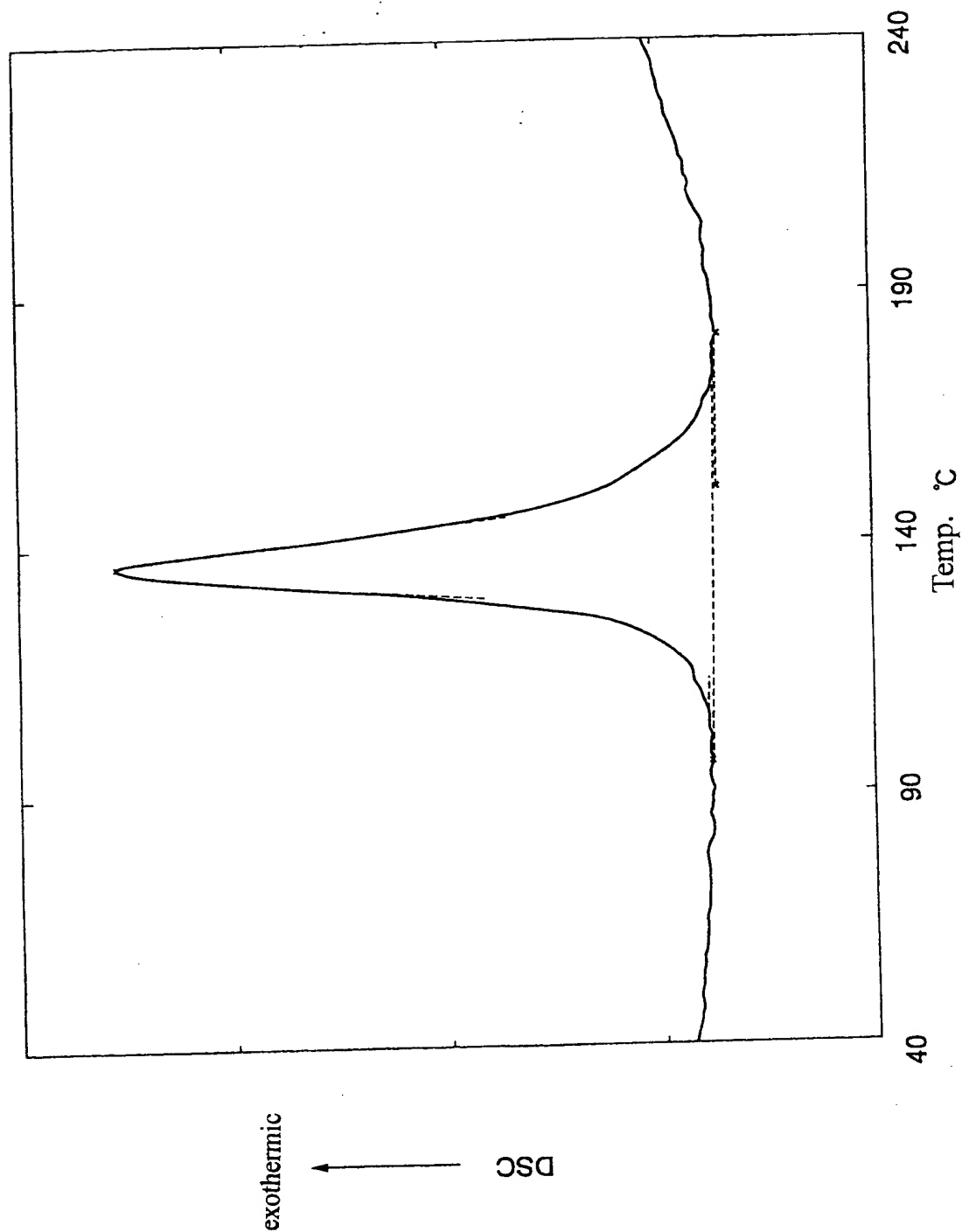


Figure 64

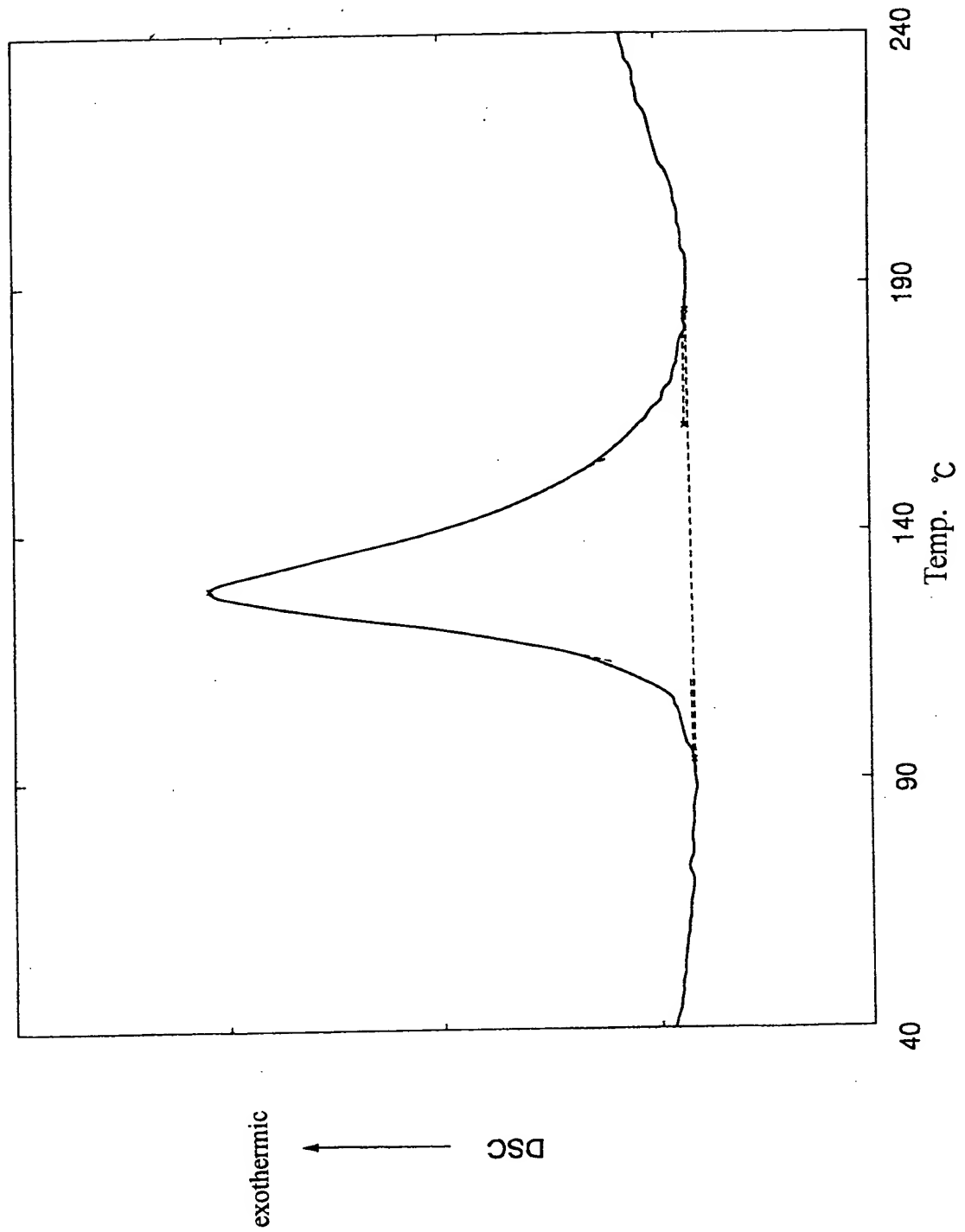




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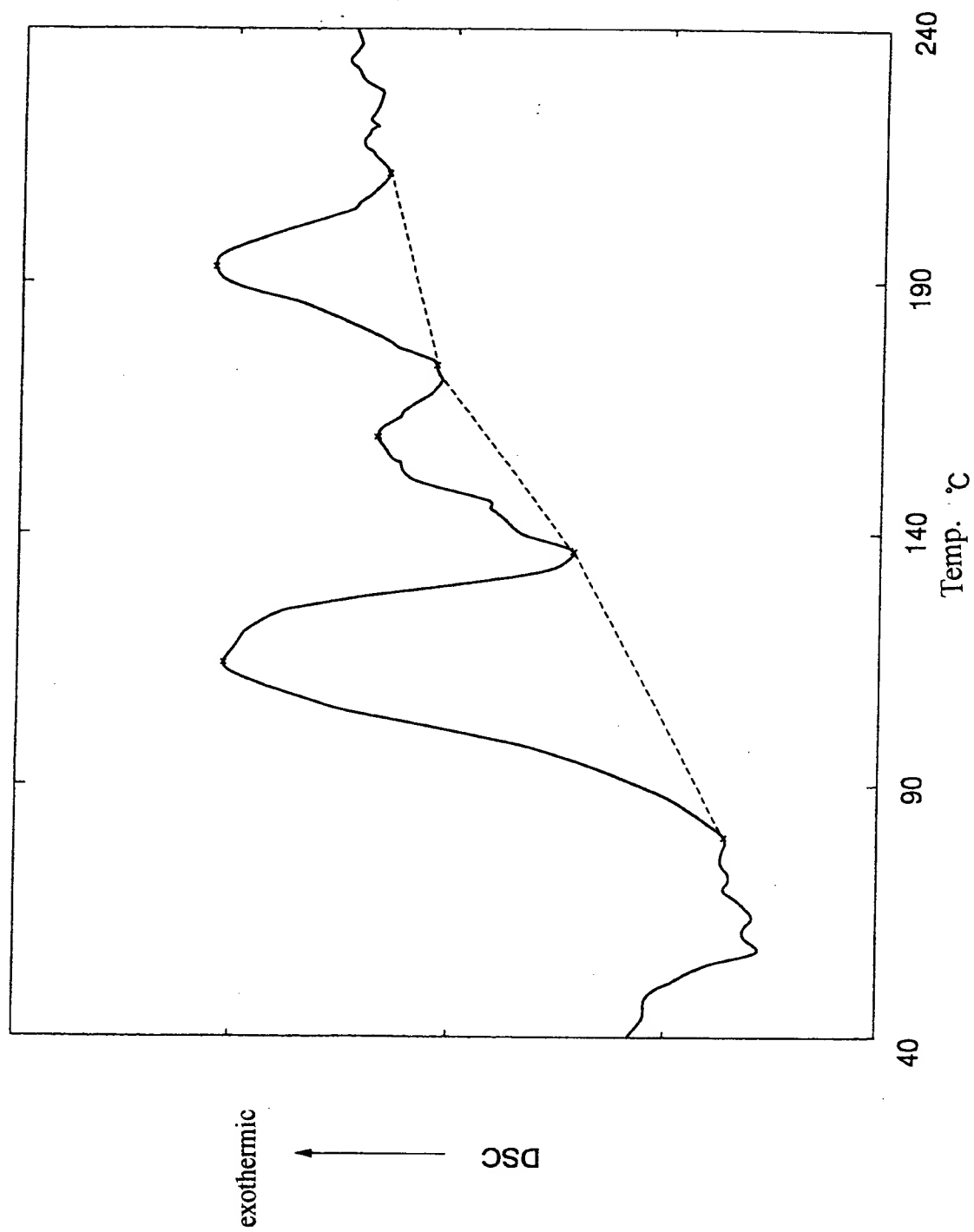


Figure 66

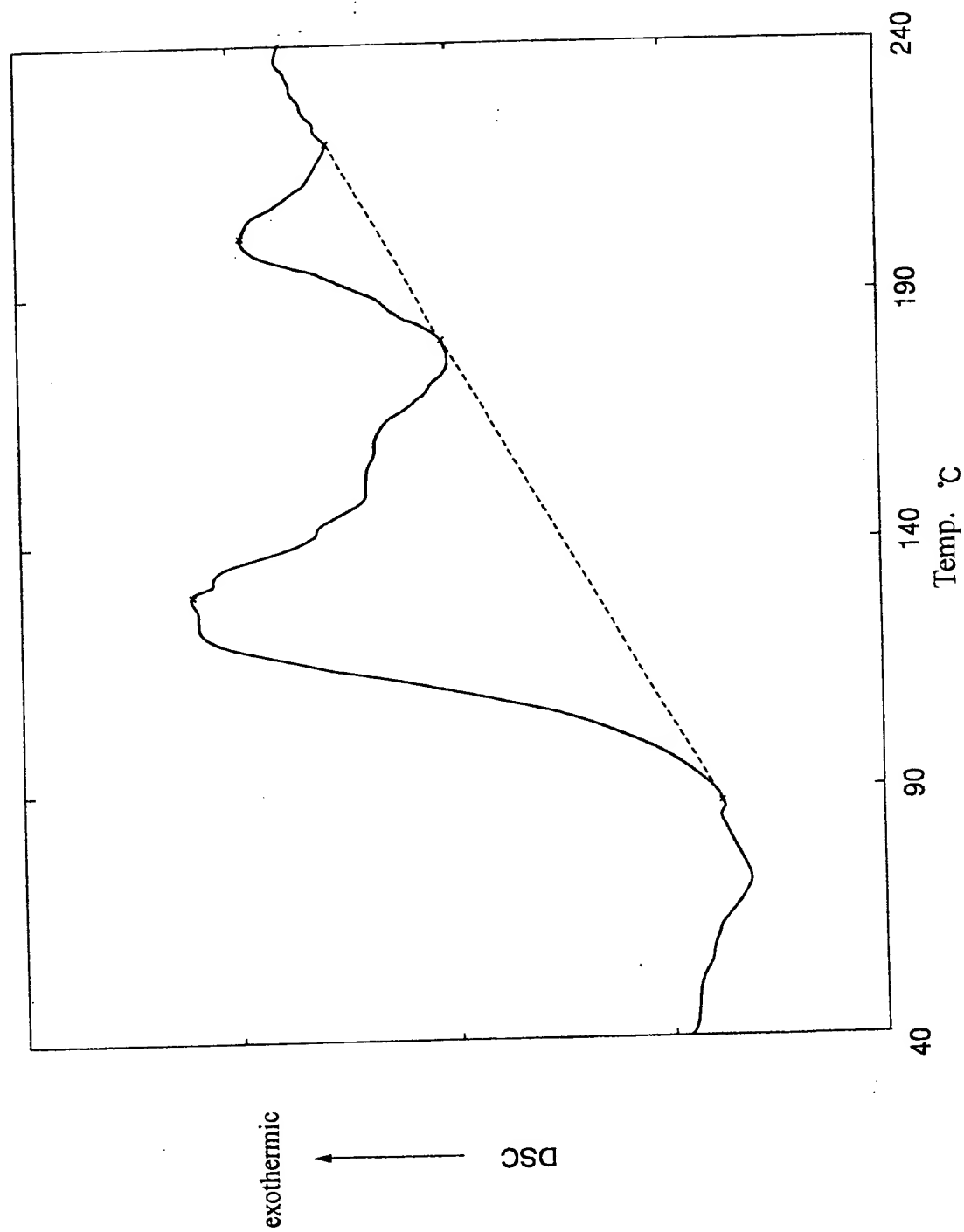


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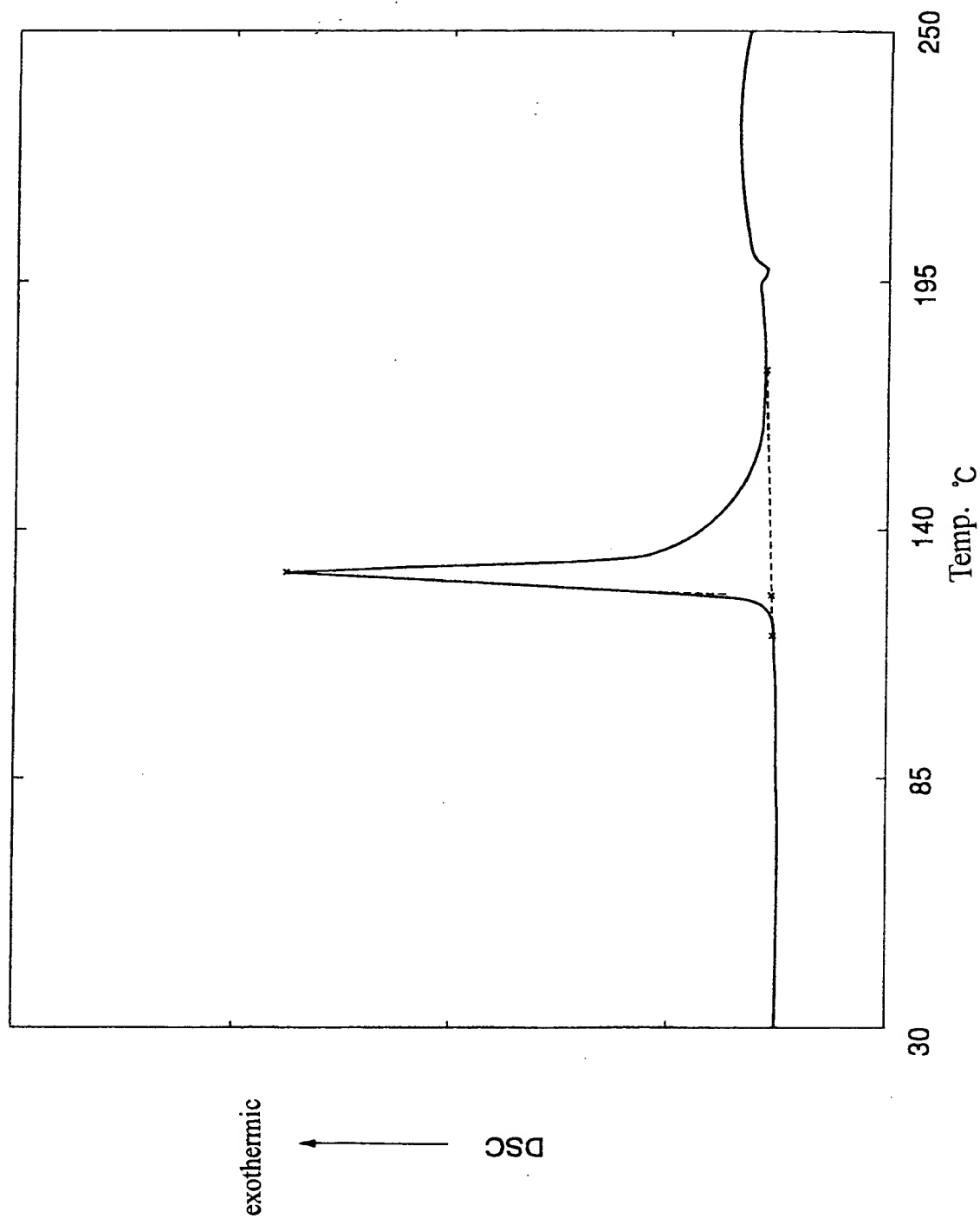


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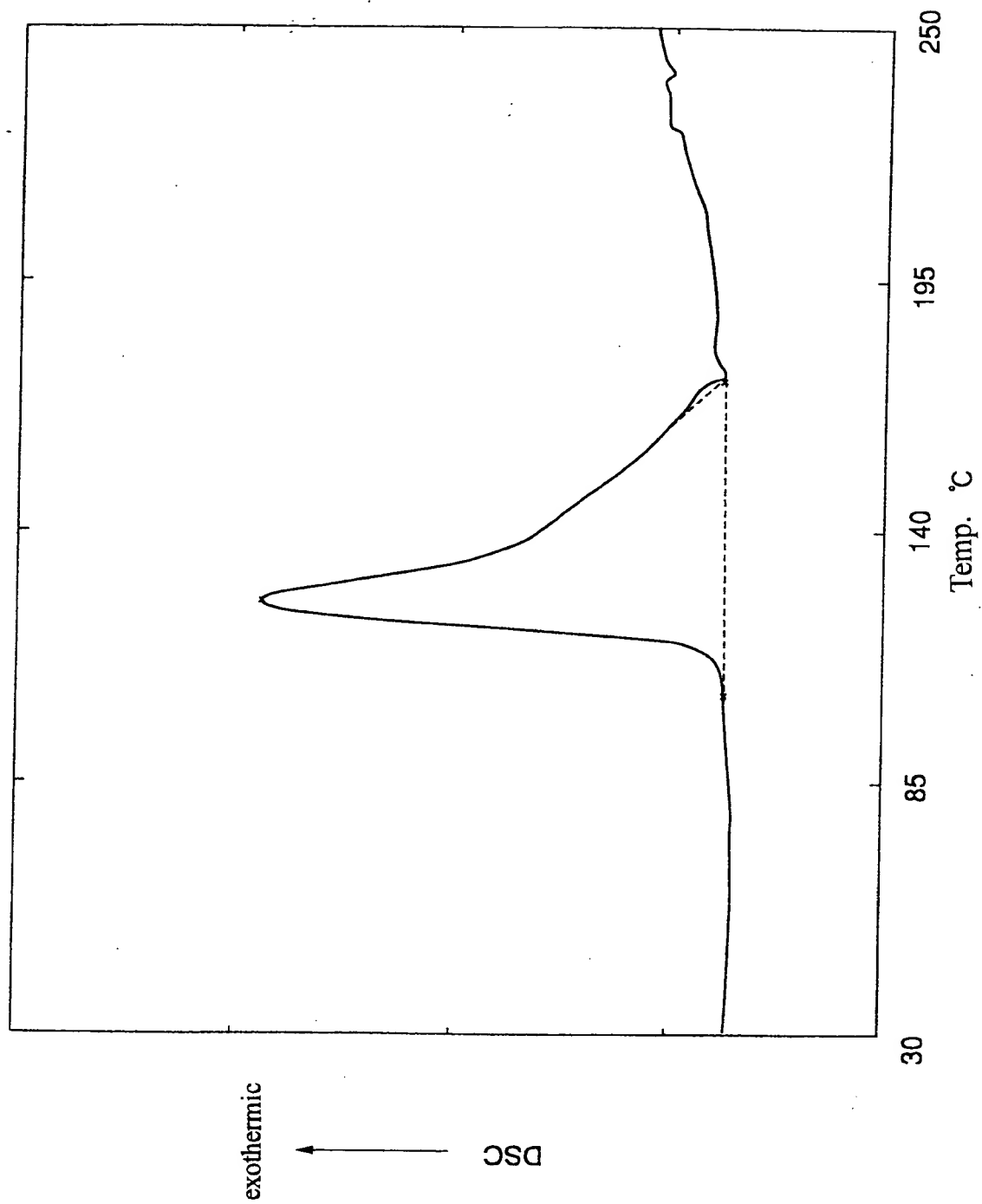


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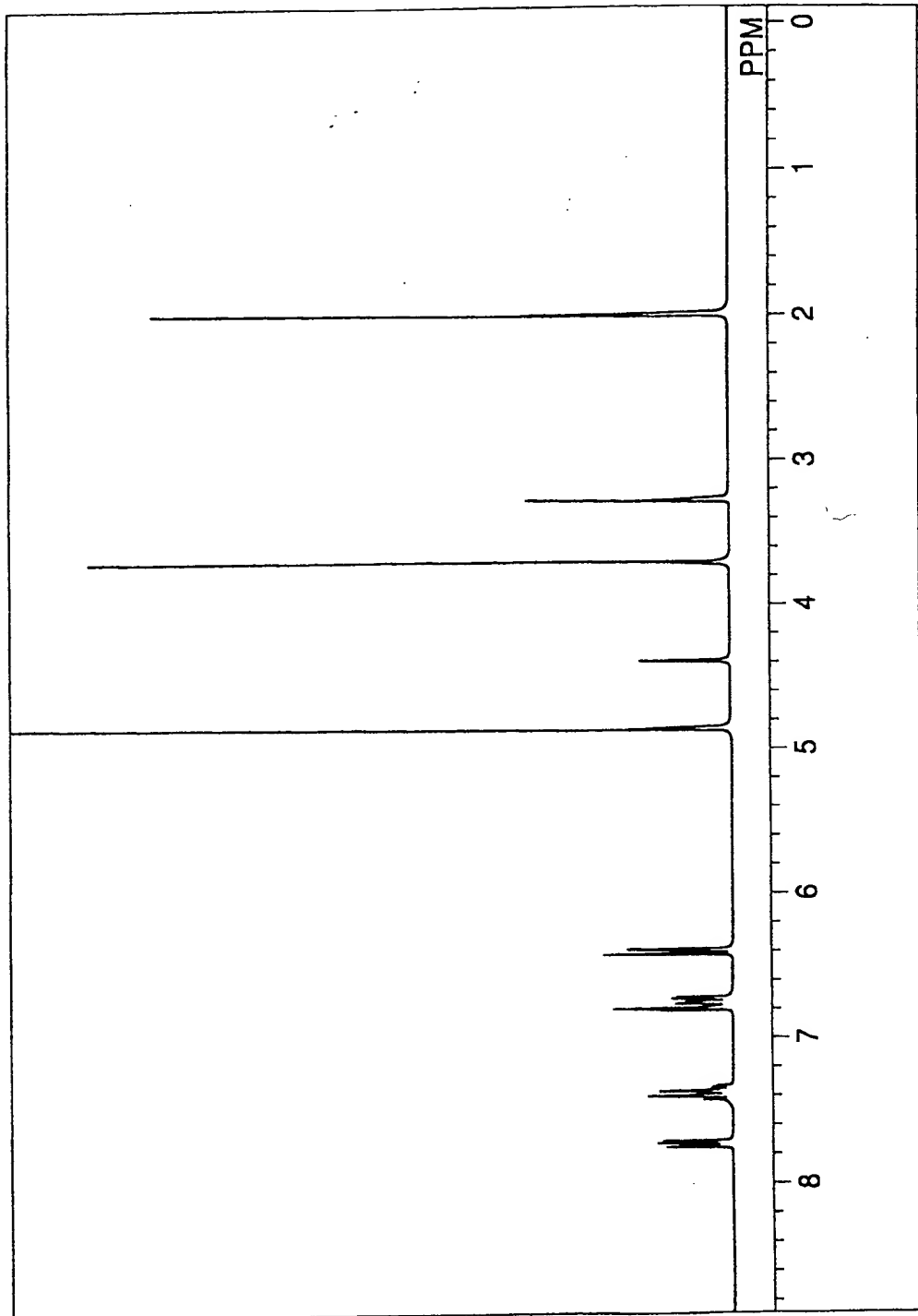


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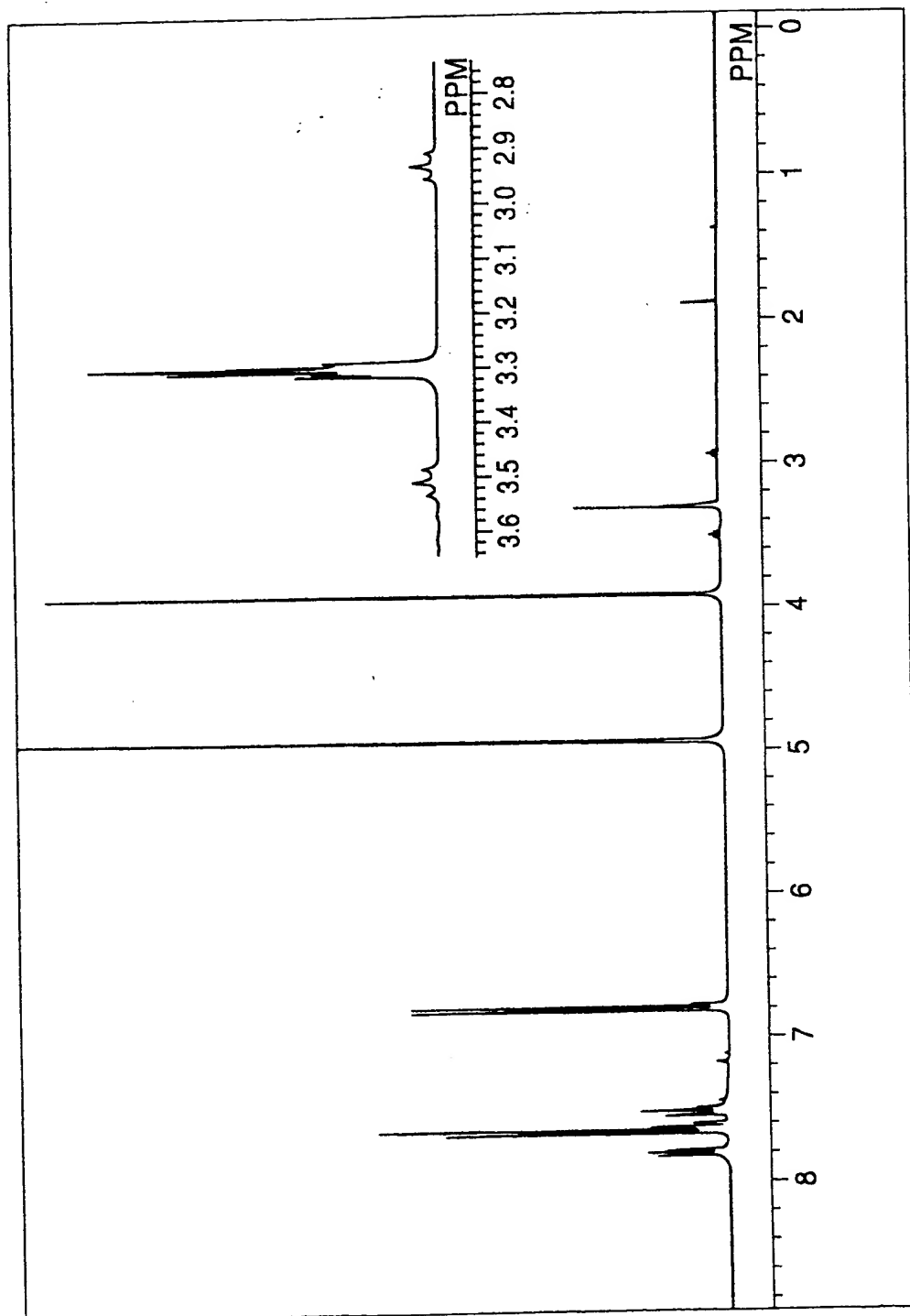


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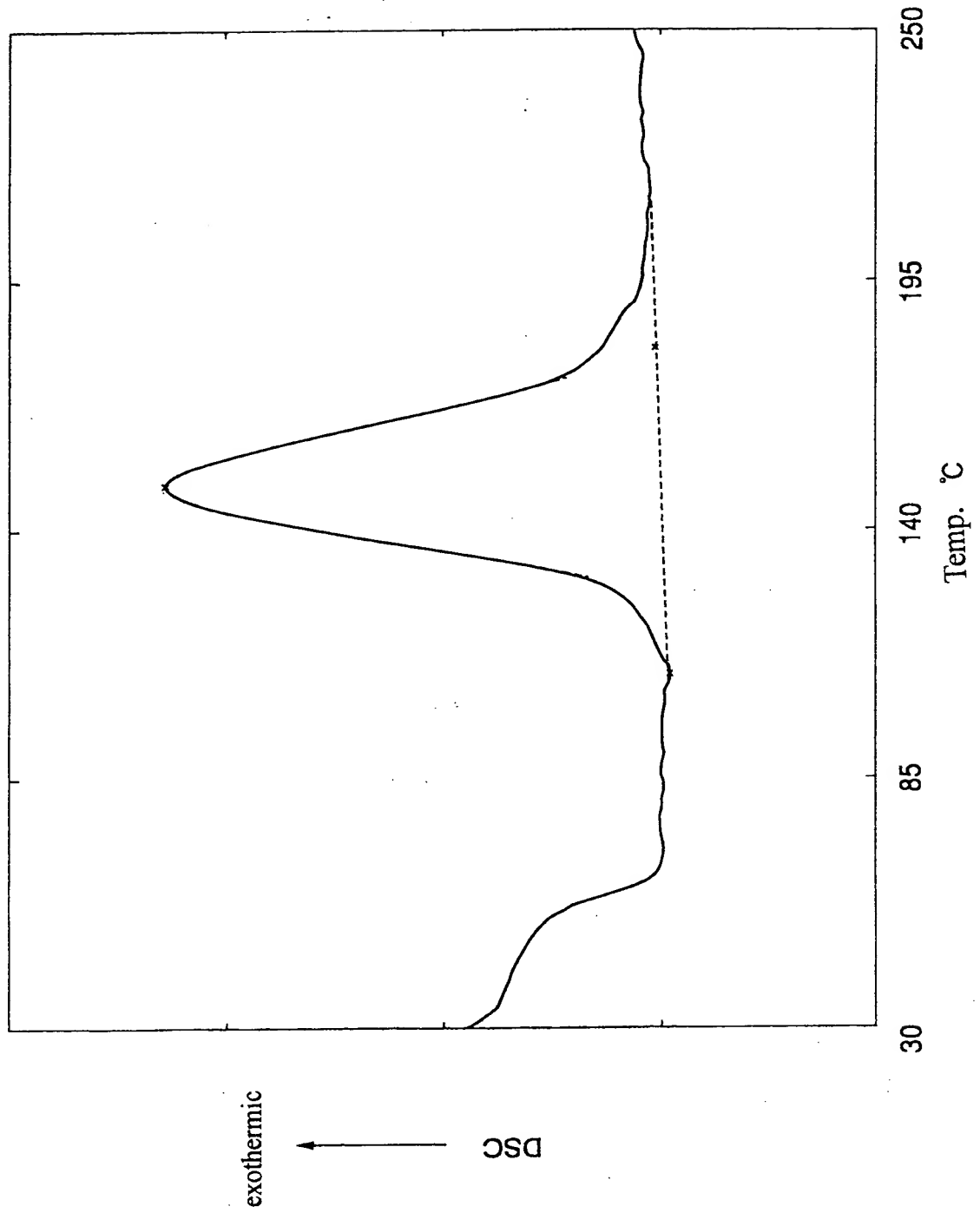


Figure 72

